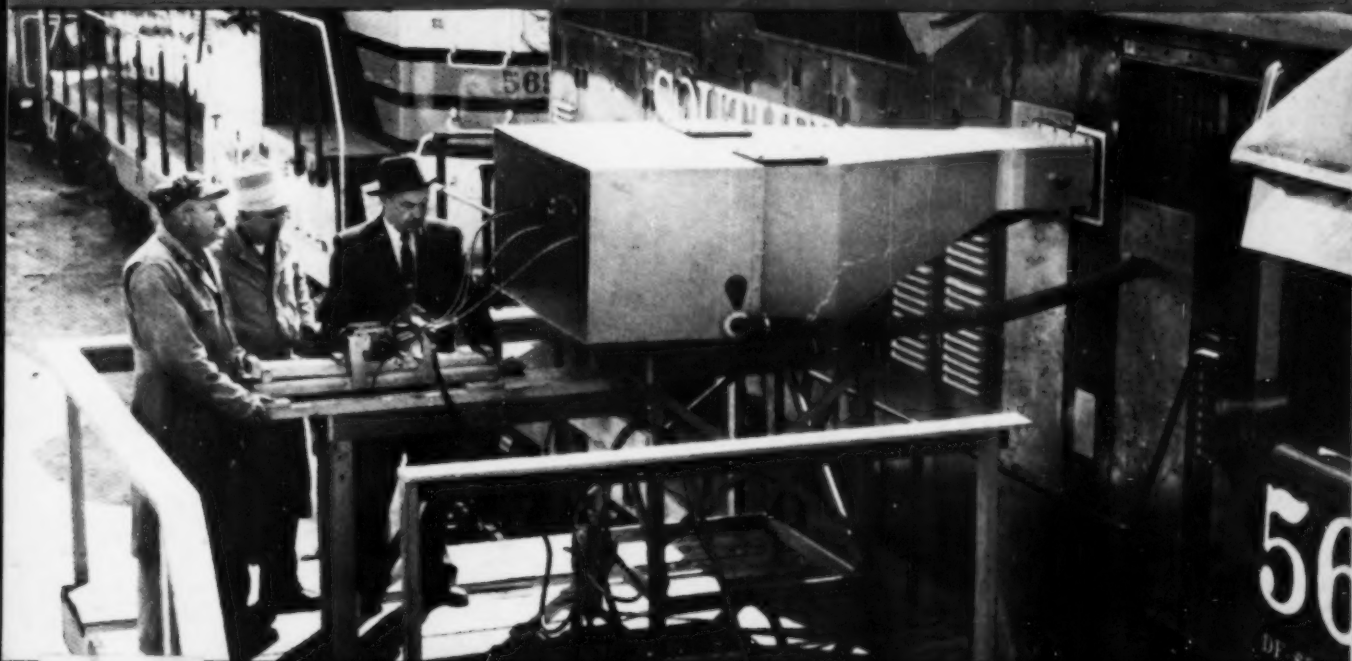


Wrecker Truck Speeds
Car Repairs on C&NW

March 2, 1959

RAILWAY AGE *weekly*



SP's Atoms

Now isotopes are being used
to measure diesel wear

COMP
STEVEN RICE
UNIVERSITY MICROFILMS
313 NO FIRST ST
ANN ARBOR MICH

60 cents

A Simmons-Boardman TIME-SAVER Publication



Let's remove
this barrier to
Railroad Progress
now!

During World War II a *temporary* Federal tax was imposed on passenger fares paid by the people who used trains, planes, buses or other for-hire carriers. One big reason for this was to discourage nonessential use of these vitally needed transportation facilities.

Today, the traveler is *still* required to pay this tax. It adds 10% to the cost of the ticket. The tax is *continuing* to discourage travel at a time when railroad passenger

service is burdened with operating deficits of \$700 million a year.

The travel tax undermines the strength and stability of the whole transportation industry. And in so doing it threatens the ability of the railroads and other public carriers to keep pace with the growing needs of our economy and national defense.

The tax on travel is a deterrent to progress and preparedness. IT SHOULD BE REPEALED!

ASSOCIATION OF AMERICAN RAILROADS • Washington, D. C.

from
coast
to
coast

RACOR TRACK SPECIALISTS SERVE YOU BETTER...

with America's most complete
line of special trackwork:

For every use and installation—Railroads and Industries • A complete line of *frogs, switches and crossings* plus • *Depth hardened manganese steel crossings* • *Manganese steel guard rails* • *Vertical switch rods* • *Switch point locks* • *Automatic switch stands* • *Samson switch points* • *Snow-Blowers* • *Switch point guards* • *Rail and flange lubricators* • *Adjustable rail braces* • *Tie pads* • *Racor studs* • *Dual spike setters* • *Dual spike drivers*.

with America's most complete
trackwork manufacturing
facilities:

Strategically located from coast to coast, ready to serve your needs promptly and efficiently.

with America's most complete
trackwork engineering service:

An important part of this service lies in making available to railroads a wealth of Racor engineering experience—*practical* experience that comes from many years of designing and manufacturing trackwork and specialties . . . *advanced* experience that is helping solve to-

RACOR PLANTS:

Buffalo • Chicago Heights • East St. Louis • Los Angeles
Niagara Falls, Ontario, Canada • Pueblo • Superior.



RACOR SALES AND ENGINEERING:

Chicago • Cleveland • Denver • Houston
Los Angeles • Louisville • New York • Philadelphia
Pittsburgh • Richmond • San Francisco • St. Louis
St. Paul • Niagara Falls, Ontario, Canada.



RACOR RESEARCH:

Chicago • Mahwah, N. J.

morrow's railroad problems today in Racor research laboratories . . . *rounded* experience that has been tested and proven in countless trackwork installations throughout the United States and Canada.

Why not let us help you with your trackwork problems? Now, more than ever before, the expanded coverage of our Railroad Products Division puts Racor service "right around the corner."

RAILROAD PRODUCTS DIVISION

530 Fifth Avenue
New York 36, New York

In Canada: Dominion Brake Shoe Company, Ltd.




Since 1881



principal supplier to America's Railroads





“Automation is a must”

*says Mr. David A. Hill,
Consultant,
Railroad Securities
Chicago, Illinois*

“Railroads cannot afford NOT to mechanize. The annual saving from funds invested in modernization is substantial. In fact, bank loans for such purposes as C.T.C. and electronic classification yards are self-liquidating.”

This prominent securities consultant, like many others in his field, firmly believes that increased automation is the best way railroads can reduce operating expenses . . . and improve profits.

The meaning is clear. And, more and more railroads are installing the needed cost-cutting control systems. UNION Centralized Traffic Control and UNION VELAC® Classification Yard Systems have proved their outstanding ability to promote efficient, reliable service and to reduce operating costs. Let us tell you about them. An inquiry will bring interesting factual information together with a list of installations and proof of savings.

“Pioneers in Push-Button Science”



UNION SWITCH & SIGNAL

DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY—

SWISSVALE, PENNSYLVANIA

NEW YORK . . . PITTSBURGH . . . CHICAGO . . . SAN FRANCISCO



Departments

New Equipment	31
New Products Report	22
Organizations	35
People in the News	34
Railroading After Hours	26
Railway Market	31, 32
Supply Trade	35
The Action Page	38
This Month	32
Watching Washington	10
You Ought to Know	36

Editorial and Executive Offices

• New York 7, 30 Church St.
JAMES G. LYNE, Editor
ROBERT G. LEWIS, Publisher
 Executive Editor **Joe W. Kizzia**
 Managing Editor **Fred S. Miller**
 News Editor **Luther S. Miller**
 Traffic-Transportation... **G. C. Hudson**
 Mechanical
 C. L. Combes **F. N. Houser, Jr.**
 Signaling & Communications
 Robert W. McKnight **Robert J. Barber**
 Associate Editors
 R. H. Craib **Harry M. Grayson, Jr.**
 Librarian **Edith C. Stone**
 Editorial Assistant **June Meyer**
 Art Director **Russell F. Rysam**
 Design and Layout ... **Joel Patrower**
 • Chicago 3, 79 West Monroe St.
 Western Editor .. **Wallace W. Abbey**
 Regional News **Gus Welty**
 Mechanical **Norman E. Gillespie**
 Engineering **M. H. Dick**
 R. E. Dove **E. W. Hodgkins, Jr.**
 Purchase & Stores **R. M. Schmidt**
 Editorial Assistant ... **Wanda Brown**
 • Washington 4, National Press Bldg.
 Washington Editor .. **Walter J. Taft**



Railway Age, established in 1936, is indexed by the Industrial Arts Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.

Published weekly by the Simmons-Boardman Publishing Corporation at 440 East State Post Road, Orange, Conn. Second-class postage paid at the Post Office at Orange, Conn. **James G. Lyne**, chairman of the board; **Arthur J. McGinnis**, president and treasurer; **F. A. Clark**, vice-president and secretary; **George Dusenbury**, vice-president and editorial and promotion director.

Three unions ask 12% hikep. 9

The BLE, ORC&B and SUNA, representing some 100,000 operating employees, are serving wage notices this week—an effort, some believe, to shift attention away from the railroad demands for revision of work rules.

Cover Story—SP's atoms measure diesel wearp.16

Radioactive tracer techniques cost less and work more quickly than previous measuring methods. They're part of the road's program of evaluating economy distillates and light residual fuels.

Cover Story—Special truck speeds car repairsp.17

The truck, with its crew, travels wherever it's needed on the C&NW's 954-mile Iowa Division. Handling of cars set out with hotboxes has been speeded up.

Southern's new CTC speeds freightp.18

The signaling setup utilizes alternate sections of one track and two track. It has reduced freight-train idle time, and permitted removal of 80 miles of track.

EMD aims to cut railroad paperworkp.23

A proposed new invoicing system could eliminate at least 75% of the invoices EMD now issues for diesel locomotive parts. Railroad accounting and clerical costs would benefit, too.

UP terminal gets a new lookp.27

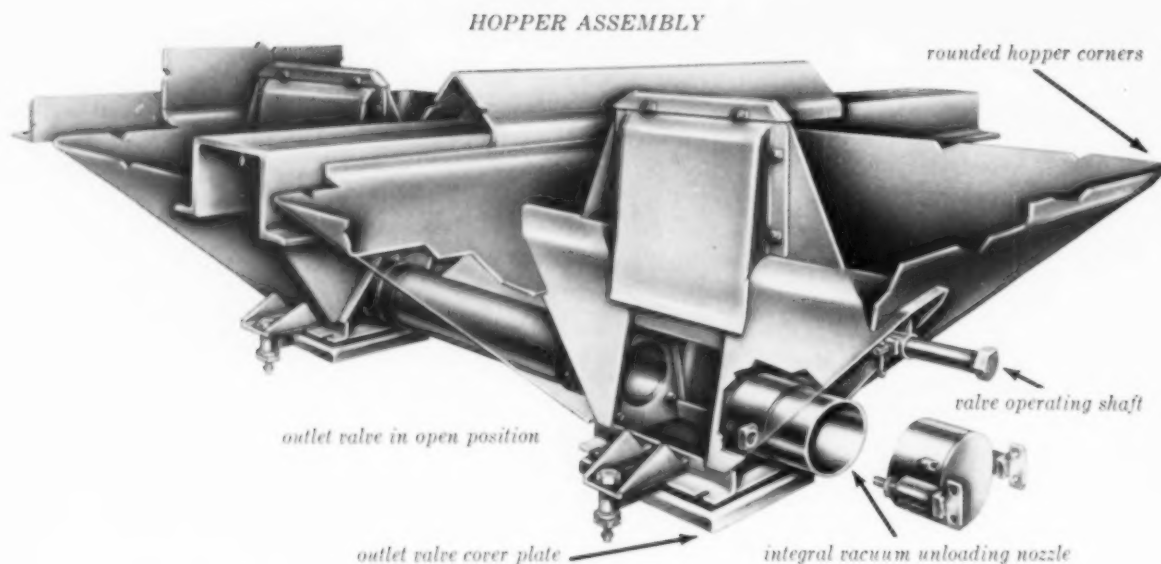
A \$10,000,000 face-lifting job on Union Pacific's Albina yard at Portland, Ore., is due for completion this year. A stand-out feature is a freight house that can handle a 90-car train under a single roof.

Drivers fight shift to TOFCp.29

Piggyback has touched off a job-security squabble between truckers and Teamster unionists. In the West, Teamsters are trying to prevent the shifting of five bid runs to the rails. In the Midwest, drivers are protesting "one-way" use of flat cars.

Brake-X test shows good performancep.33

Recent inspections of two cars equipped with the device revealed little wheel-tread and brake-disc wear. Both cars operated in high speed service.



PROTECTED UNLOADING GATES OF DRY-FLO* CAR KEEP LOAD SAFE FROM CONTAMINATION

Unloading gates of the DRY-FLO car are entirely within the car insuring ease of operation and eliminating pickup of foreign material. Gates open and close vertically and are not subject to pressure from within. The rate of flow of product through the unloading gates can be adjusted as desired.

The DRY-FLO car is ideal for bulk shipment of dry ingredients, particularly products that *must be protected* from contamination.



COMPETITIVE IN PRICE WITH OTHER COVERED-HOPPER CARS—DO SO MUCH MORE

*Patent rights reserved

DRY-FLO CAR DEPARTMENT
GENERAL AMERICAN TRANSPORTATION CORPORATION

135 South LaSalle Street • Chicago 90, Illinois
In Canada: Canadian General Transit Co., Ltd., Montreal
Offices in principal cities



Week at a Glance CONT.

Current Statistics

Operating revenues	
12 mos., 1958...	\$ 9,564,075,782
12 mos., 1957...	10,506,244,265
Operating expenses	
12 mos., 1958...	7,543,878,732
12 mos., 1957...	8,237,720,185
Taxes	
12 mos., 1958...	957,197,202
12 mos., 1957...	1,069,845,890
Net railway operating income	
12 mos., 1958...	761,744,586
12 mos., 1957...	923,284,629
Net income estimated	
12 mos., 1958...	602,000,000
12 mos., 1957...	740,000,000
Average price 20 railroad stocks	
Feb. 24, 1959...	109.49
Feb. 25, 1958...	67.63
Carloadings revenue freight	
Seven weeks, 1959	3,874,757
Seven weeks, 1958	3,782,179
Freight cars on order	
February 1, 1959	29,470
February 1, 1958	48,787
Freight cars delivered	
1 month, 1959...	1,940
1 month, 1958...	7,219

Advertising Sales Department

Duane C. Salisbury—vice-president,
director of sales

New York 7, N. Y., 30 Church st.,
WOrth 4-3060
J. S. Vreeland—vice-president;
F. T. Baker—district manager;
J. C. Lyddy; W. E. Glasby

Chicago 3, Ill., 79 W. Monroe st.,
BAndolph 6-0794
J. R. Thompson—vice-president;
J. W. Crossett—district manager;
J. D. Dolan—district manager

Cleveland 15, Ohio, 1501 Euclid ave.,
MAin 1-4455
H. H. Melville—vice-president;
H. M. Blunt—district manager

Philadelphia, Pa., Jericho Manor,
Jenkintown, Pa., Turner 7-4526
W. E. Glasby—district manager

Pittsburgh 19, Pa., Suite 203, Carlton House
GBant 1-8186
C. J. Fisher—district manager

Atlanta 9, Ga., 22 Eighth st., N. E.,
TRinity 2-6720—J. S. Crane

Dallas 19, Tex., 3908 Lemmon ave.,
LAkeside 2322—Joseph Sanders

Los Angeles 17, Cal., 1151 W. Sixth st.,
HUnting 2-4000
Fred Kianet, Jr.; B. J. Erickson

Portland 5, Ore., 1220 S. W. Morrison,
CApital 7-4993—L. B. Conway

San Francisco 4, Cal., 244 California st.,
GAirfield 1-7004—Lewis Vogler

London E. C., 1 Eng., 8/9 Clerkenwell Green
Sibley-Field Publishing Co., Ltd.

Frankfurt am Main 116, West Germany
Wittelsbacher Allee 60
Georg J. Linder,
Continental European Representative

Subscription to railroad employees only in U.S. possessions, Canada and Mexico, \$4 one year, \$6 two years, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, \$10 a year, in other countries, \$15 a year. Single copies 60c except special issues. Address all subscriptions, changes of address, and correspondence concerning them to: Subscription Dept., Railway Age, Emmett St., Bristol, Conn.
Circulation Dept. R. C. Van Ness, Director of Circulation, 30 Church St., New York 7, N. Y.
POSTMASTER—SEND FORM 3579 to EMMETT ST., BRISTOL, CONN.

The Action Page—A program labor should supportp.38

Interests of labor and management are not always at cross purposes. An extremely fertile field for cooperation is maximum utilization of railroad plant. Benefits of such utilization would be huge—to employees and employers alike.

NEXT WEEK: Big pre-convention issue on AREA meeting in Chicago, including catalog of new products and special features. Bonus: final report in Railway Age series on 1958 passenger results.

Short and Significant

Faster New York-Washington trains . . .

may result from studies now under way on the Pennsylvania. New test runs have been made, one with GG-1 and Keystone equipment, another with E-6 MU cars. Both made intermediate stops, checking the possibility of trimming more than 30 minutes off present running time. Most PRR trains now cover the 225-mile distance in just under four hours.

Labor disputes flared into the open . . .

on two western railroads during the past 10 days. A brief engineers' strike tied up Union Pacific operations in Oregon and Washington. The trainmen called a strike against Chicago & North Western, then agreed to an indefinite postponement at the request of the National Mediation Board. Both disputes involved working rules.

Five railroads are cooperating . . .

in a new piggyback service for fresh frozen vegetables from northern Maine to the New York-New Jersey metropolitan area. Mechanically-refrigerated trailers, loaded at Caribou, Me., and Washburn, on the Bangor & Aroostook, move over the Maine Central, the Boston & Maine and the Delaware & Hudson to Binghamton, N. Y., where they are interchanged for final delivery to Hoboken, N. J.

First international piggyback service . . .

between the U. S. and Canada will be inaugurated March 23 by the Lackawanna and the Canadian National. The service will be offered between New York-New Jersey and Toronto metropolitan area at the outset, may be extended later.

A stalemate in fare reductions . . .

is the situation presently in western territory. A discussion of ways and means to reduce first class fares, scheduled for last week, has now been indefinitely postponed. (RA, Feb. 23, p. 7.)



**FIND
CRACKED JOURNALS**
quickly · easily
positively with the
ECHOMETER
Ultrasonic
Journal Test Set



The **MODEL TS 602**
Echometer Railroad
Journal Test Set

This is the ultrasonic testing unit that saves time and money for railroads. Easy-to-use, the operator simply applies the probe and pulls the trigger. An alarm sounds when there's a flaw in the journal. This is a genuinely simple testing technique.

It is well known in the railroad industry that one out of four hundred freight cars is running with a cracked journal. Finding this journal is essential in preventing costly damage to rolling stock, roadbed and lading.

The Curtiss-Wright Echometer Test Set finds cracked journals *quickly*—up to 60 cars an hour,—*easily*—no operator training,—*positively*—both audible and visual alarms.

Write for the new Curtiss-Wright brochure on preventing broken axles by ultrasonically detecting cracked journals.

PRINCETON DIVISION
CURTISS-WRIGHT
CORPORATION • PRINCETON, N. J.

In Canada contact CANADIAN CURTISS-WRIGHT LIMITED, 1980 SHERBROOK STREET WEST, MONTREAL, P.Q., CANADA
In countries other than U.S.A. and Canada contact EXPORT DIVISION, CURTISS-WRIGHT CORPORATION, 50 ROCKEFELLER PLAZA, NEW YORK 20, NEW YORK

Three Unions Ask 12% Hike

Increase would apply to 100,000 BLE, ORC&B and SUNA employees, effective Nov. 1. The early wage demands are viewed in some quarters as an effort to take the spotlight off featherbedding.

► **The Story at a Glance:** Railway labor's 1959 wage movement begins this week. Three operating brotherhoods, with a combined membership of almost 100,000 men, are serving uniform demands for a 12 per cent pay increase effective Nov. 1.

Some observers expressed surprise that the demands are coming so far ahead of the Oct. 31 expiration of the current moratorium on wage and rules changes. One viewpoint: the move may be intended, in part, to take the spotlight off the railroads' big push for revision of restrictive working rules applying to the operating crafts.

The Brotherhood of Locomotive Engineers, last major union to settle in the 1957 wage go-round, has become one of the first to file a Section 6 notice for the next series of negotiations. The BLE, the Order of Railway Conductors & Brakemen and the Switchmen's Union of North America are serving demands this week for a 12 per cent lump sum increase.

Major provisions of the organizations' demands:

- The 12 per cent increase shall apply to wage rates in effect next Nov. 1, including a cost-of-living adjustment due May 1.

- Cost-of-living adjustments provided for in the present contract shall be incorporated into basic daily rates.

- All arbitraries, miscellaneous rates, special allowances, monthly and daily guarantees in effect Nov. 1 shall also be increased by 12 per cent.

- A new cost-of-living escalator clause shall be provided, based on the consumer price index for next September.

Rules are not involved in the current demands. The three brotherhoods interpret the existing moratorium provision as barring the serving of rules demands before Nov. 1—either by labor or by management.

Only the ORC&B has departed from the uniform pattern of the wage demands. President J. A. Paddock said his organization is asking an additional 1.6

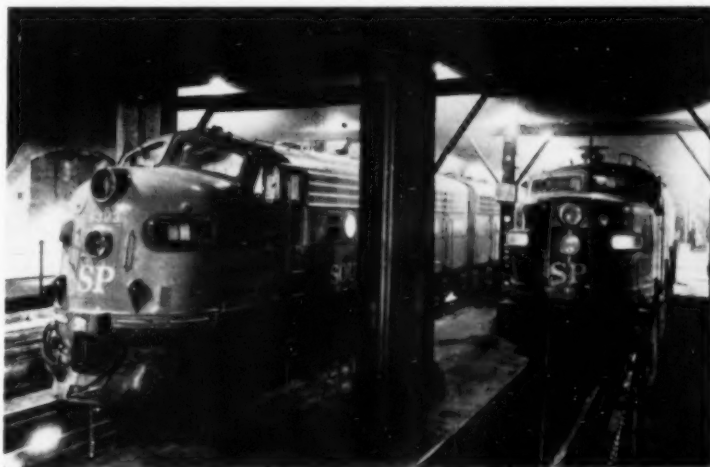
per cent wage increase for conductors based on rates in effect in October, 1956. The extra demand, he said, results from "a misunderstanding over the 1957 settlement."

Neither of the other two major operating unions—the Brotherhood of Railroad Trainmen and the Brotherhood of Locomotive Firemen & Engineers—has its wage demands ready. A BRT officer said his organization has a general outline drawn up, but the program hasn't been finally approved. BLF&E demands are under discussion, but probably won't be served until late summer, after the brotherhoods' convention and a meeting of the Association of General Grievance Committees.

No estimates were immediately available on the cost of the BLE-ORC&B-SUNA demands to the railroad industry. In the last month for which

specific figures are available, however, the railroads had an average of 210,000 employees in train service, and paid out almost \$132,000,000 in compensation. Based on that employment level—and carrying out the 12 per cent figure to cover all operating employees—the demand could cost the industry almost \$200,000,000 on an annual basis.

Presidents of the three unions were non-committal on a rules movement, except to emphasize their position that no demands can be served until the moratorium expires. BLE general chairmen are scheduled to meet in late summer to consider their program. ORC&B's Mr. Paddock says it's "difficult to tell" when the rules issue may be handled. One reason he cites: the Loomis proposal for a Presidential commission study of the rules problem and



New Dress for SP Diesels: Red and Gray

Southern Pacific is simplifying its diesel locomotive paint scheme along the pattern illustrated by these EMD and Alco passenger units at West Oakland, Calif., diesel shop. The carbody is painted a medium gray

(Lark gray), with scarlet nose and white lettering. The former paint scheme was a more ornate, multi-color job. SP is also standardizing exterior paint on all passenger equipment (RA, Aug. 4, 1958, p. 36).

the brotherhoods' countering proposal to study all facets of railroad operation.

The strict interpretation of the moratorium provision appeared contradictory, in view of railway labor's actions over the past year. Non-operating unions recently climaxed a lengthy fight by winning a National Mediation Board ruling that job stabilization demands are bargainable. And all standard railway brotherhoods except the BLE and ORC&B joined last fall in a four-point 1958 rule movement.

Some observers see the union wage move as an attempt to forestall any carrier proposal on rules, an attempt to get precedence for the wage case in negotiations and in the mediation board-emergency board proceedings which they see as inevitable.

These observers see a possible move by the unions to get a wage case through the machinery set up under the Railway Labor Act by Nov. 1. If no settlement should be made by that time, a strike would be possible—and the railroads would face an emergency

situation over union demands (wages), not their own demands (rules).

As background, here's what the engineers have done in two recent wage cases. The union demanded a 15 per cent increase in basic wages and arbitraries in the case settled in July 1957. They got 13 per cent over three years, in installments of 6 per cent, 3.5 per cent and 3.5 per cent. More recently, the union agreed to a wage increase totaling about 9.5 per cent over 30 months on Canadian Pacific's eastern region.

Featherbedding 'Cold War'

The featherbedding hassle remained in the "cold war" stage last week.

Union leaders were still cool to the idea of a White House-appointed commission to sift management's charges of a \$500-million-a-year featherbed.

Chiefs of five operating brotherhoods did agree to sit down with management representatives to discuss the welfare of the industry as a whole, but

they declined to participate in a "narrow discussion" of working rules.

Any high-level talks, they told AAR President Daniel P. Loomis, must involve "a complete study of the financial structure of the industry . . . as well as management practices which adversely affect the economic soundness of this important public service."

The operating chiefs were replying to Mr. Loomis' letter requesting that labor join management in asking President Eisenhower to appoint a commission to look into featherbedding abuses (RA, Feb. 16, p. 9).

Mr. Loomis' letter to the union leaders was dated Feb. 10—the day before he disclosed, in a St. Louis speech, management's intentions of pressing the featherbedding issue.

The union heads, pointing out that Mr. Loomis' letter coincided with the "great publicity" of his St. Louis speech, went on to say:

"This raises in our minds a question of the sincerity of your letter to us, and

(Continued on page 12)

Watching Washington *with Walter Taft*

• **THE SERVICEABLE FLEET** of freight cars continues to get smaller. The AAR reports that it lost 6,700 cars in January, when Class I railroads and their car-line affiliates placed only 1,504 new cars in service. They retired 3,325 and let the bad-order backlog build up to 8.9 per cent of ownership.

SHORTAGES, of course, are still small and of the "poor-distribution" variety. They are increasing, however, as surpluses continue to fall below the 50,000-car total which is considered desirable for normal distribution operations. Average daily surpluses are now running less than 40,000 cars, compared with more than 100,000 a year ago.

COVERED HOPPERS are the only cars of which current AAR reports are better than those of a year ago. The covered-hopper fleet is up 4,000 cars to 58,600. And more than 57,000 of them are in serviceable condition. The supply of these cars remains adequate despite record loadings which reflect their growing use as substitutes for box cars. More than 100 commodities are now moving in covered hoppers.

• **NO CHANGE IN ICC ACCOUNTING RULES** will be made to permit carriers to report to the Commission on the same basis as they may report to the Bureau of Internal Revenue for income-tax purposes. That's what a Commission policy statement says. Accounting for depreciation and income-tax payments is involved.

ALLOWANCES FOR DEPRECIATION may be computed by accelerated methods under the Internal Revenue Code, but the Commission has repeatedly held that depreciation by the straight-line method "best serves the purposes of assigning the service loss on transportation property to income of the years in which the property is in revenue service." It still thinks so, and says the use of other methods for income-tax purposes "is not an acceptable reason for changing our requirements."

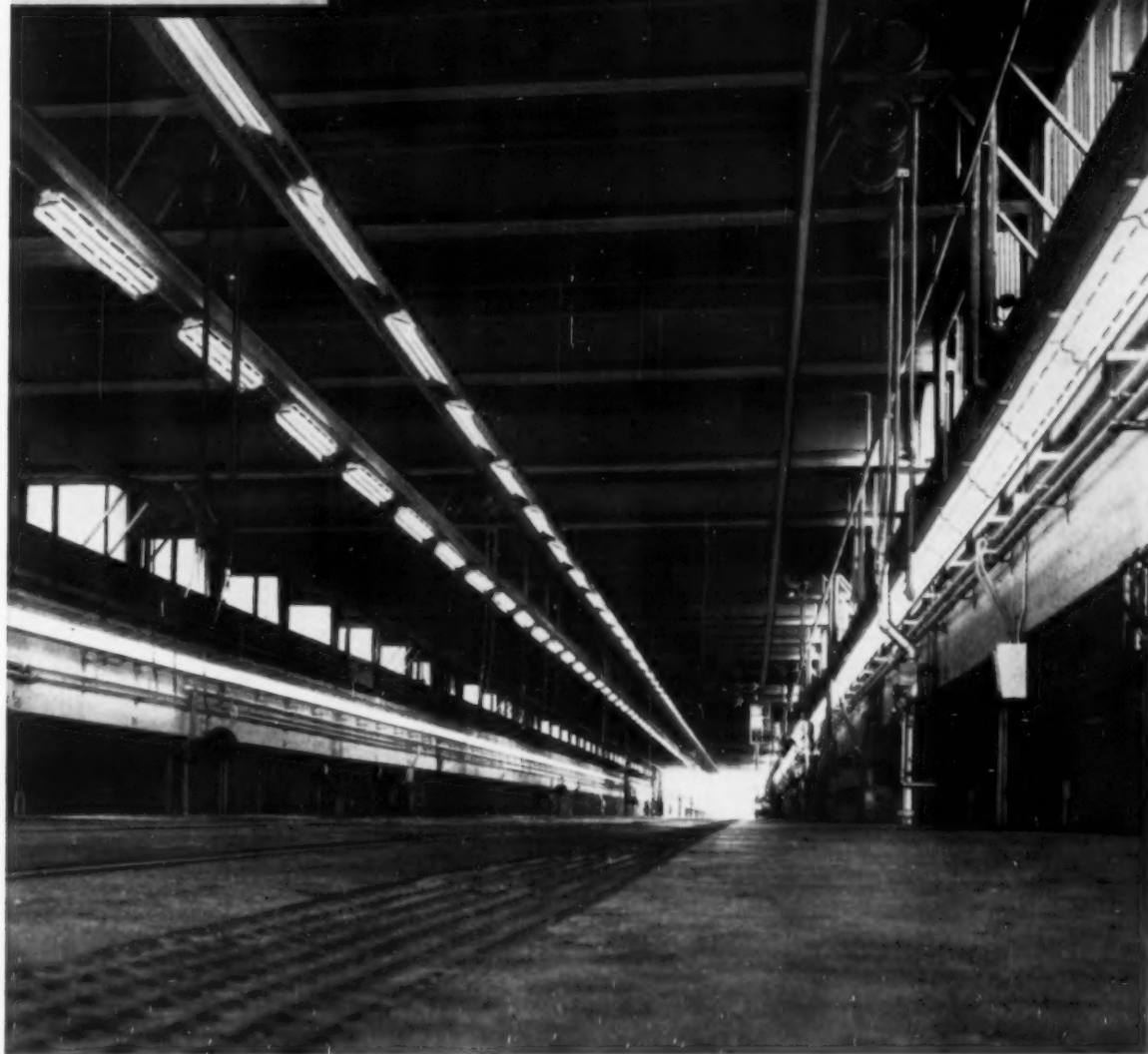
FOLLOWING THROUGH from that stand, the Commission will also continue to require that federal income taxes be reported on the amount-actually-paid basis. And it will continue to ban charges to reserves for possible higher taxes in years after the accelerated depreciation arrangements have produced 100-per-cent write-offs of the property involved. Today's shippers "should not be required to provide from current freight rates for possible increased taxes of the indefinite future," the Commission says.

• **A FORMAL RECORD** now supports senatorial views to the effect that it's not improper for members of Congress to ask the ICC about pending cases. The record was made last week at hearings which the Senate Interstate Commerce Committee held on President Eisenhower's reappointment of Commissioner Charles A. Webb. Committee members emphasized cases—without pressure on the Commission to decide one way or another.

FOR STRUCTURES...

MODERN

concrete



Building columns were placed outside masonry walls to provide unobstructed interior.

B & M's new Budd car servicing shop:

**Low maintenance cost guaranteed...
it's built top to bottom with modern concrete!**

The job called for maintaining rolling stock, not buildings. That's why the Boston & Maine Railroad chose concrete all the way—floor, walls, roof—for servicing their RDC fleet. It's as maintenance free as you can make a building. Fire resistant, too.

The prestressed concrete roof girders were chosen for their high load-bearing strength. They support the monorail-mounted sand hoppers and a 10-ton

sand storage tank, as well as the normal roof load.

The use of prestressed concrete increases daily on railways—not only for buildings but for towers, bridges, structures of all kinds. With prestressed concrete, count on minimum cost and quick erection.

PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the uses of concrete



Double, Double, Toil and Trouble: Thruway Test Rolls On

A month of testing on New York's Thruway has turned up no special problems in double-bottom operations. The Thruway says officially that it is still too early to tell what the outcome of the experiment (RA, Feb. 16, p. 52) will be, but motor carrier observers are calling the preliminary results "gratifying." Most toll roads, unlike state highways, have the right to set their own size and weight limits by administrative action rather than by

legislation. Thus, though like most eastern states, New York sets a maximum length of 50 feet and a maximum weight of 65,000 pounds for units operating on state roads, the Thruway for this experiment is permitting an overall length up to 98 feet and a maximum gross weight of 127,400 pounds. Thruway officials check each trip carefully, pay particular attention to performance, speed, unusual driving conditions.

Engineers OK Rules Changes

Locomotive engineers in Canadian Pacific's eastern region have agreed to a pair of significant contract amendments in a new 30-month pact recently negotiated. The changes involve:

- Rates of pay based on number of diesel units rather than on weight-on-drivers.

- Negotiations for establishment of intra or inter seniority district runs, with provision for disputes to be referred to the Canadian Railway Board of Adjustment No. 1 "for final settlement."

The agreement also provides for wage increases totaling about 9.5 per cent, in installments retroactive to July 14, 1958, and effective March 14 and Oct. 14, 1959.

The change in basis of pay appears to be aimed primarily at accounting simplification. Rates for a 100-mile day in freight service (after Oct. 14), for example, will range from \$16.59 for operation of a single unit to \$20.54 for operation of four units coupled in multiple. An extra \$1.32 is to be added for each unit over four. Only special case handled separately involves operation of Trainmasters—an engineer operating with two Trainmasters will be paid at the same rate as a man operating with three units of any other type diesel power.

The section dealing with establishment of intra or inter seniority district operations met with some opposition

among members of the Brotherhood of Locomotive Engineers. But BLE Grand Chief Guy L. Brown noted, "This is something seemingly in the offing and it is a question that everyone is being confronted with. The CPR agreement at least has a provision that they will negotiate beforehand and that in the event they can't agree, the dispute will be referred to the Canadian Board of Adjustment No. 1 . . ."

Under the new CPR rule, "Inter or intra seniority district runs may be established when it can be demonstrated by the company that such changes are necessary by operational requirements, either as a means of speeding up service or to maintain such service on an economical basis. It is not the intent of this rule that rights or practices of establishing or changing home terminals will be affected, or that presently established divisional home terminals or unassigned pool home terminals will be abolished . . ."

"The establishment of these runs will be negotiated locally between the general superintendent and the general chairman . . ."

"If the parties fail to concur in the establishment of such a run on the basis of the reasons set forth by the company, the matter may be referred to the Canadian Railway Board of Adjustment No. 1 for final settlement without stoppage of work."

WAGE DEMANDS

(Continued from page 10)

gives us the impression that it may have been designed merely as a sounding board for publicity matter.

"We think it ill-advised for you to attempt to negotiate with us through the media of general public relations agencies. In our opinion it was bad faith in not first giving the representatives of the employees to whom you addressed your communication an opportunity to discuss this matter with you. Your approach is bound to have a further depressing effect upon the already low morale of employees because of the manner in which it was handled . . ."

"We are agreeable . . . to meet with rail management representatives for further exploratory discussion on the general subject raised by your letter of Feb. 10, as we have a sincere interest in protecting the welfare of our country, the solvency of the railroad industry and the security of the workers. These conditions cannot, however, be limited to the narrow issues of the impact of a few rules in labor agreements, but must in fairness to all . . . be extended to all phases and facets of the industry."

The letter was signed by Guy L. Brown, grand chief of the Brotherhood of Locomotive Engineers; H. E. Gilbert, president of the Brotherhood of Locomotive Firemen & Enginemen; J. A. Paddock, president of the Order

of Railway Conductors and Brakemen; W. P. Kennedy, president of the Brotherhood of Railroad Trainmen; and W. A. Fleete, president of the Switchmen's Union of North America.

AAR President Loomis said last week that the industry's call for modernization of antiquated "make-work practices . . . has been echoed by representatives of Congress, the President, the Interstate Commerce Commission and state regulatory agencies."

"These objective groups," he said, "have made it clear that an end to featherbedding on the rails would open the way to lower prices for consumers, new jobs for railroad employees and better transportation service for everyone."

He quoted the following from the 1955 report of Presidential Emergency Board 109: "The fact that the railroad wage rate structure for operating classifications has received no comprehensive review for more than 30 years, and no systematic study for almost 20 years, alone suggests that it may well be obsolete and ill-designed for a modern railroad system."

He pointed out that in 1958 both the Senate Surface Transportation Subcommittee and the report of an ICC examiner on the passenger service deficit had singled out the railroad labor situation for criticism.

Rails Join New Conference To Promote Use of Soft Coal

Coal-carrying railroads have joined labor and management of the bituminous coal industry and other related groups in forming a National Coal Policy Conference "to advance and promote the interests of the industry on the broadest possible front."

Nine stated objectives of the Conference include these:

- Action to stop the dumping of residual oil at coal's expense and to put an end to the practice of dumping natural gas for industrial uses to the detriment of the coal market.

- Action to end extravagance and waste in the program to develop civilian atomic energy here and abroad.

The program was announced last week in Washington where the Conference will maintain headquarters.

Members of the executive committee include three railroad presidents—H. C. Murphy of the Burlington, Howard Simpson of the Baltimore & Ohio, and John Tilford of the Louisville & Nashville. Three of the other members are executives of the United Mine Workers, including its president, John L. Lewis.

Mr. Lewis reportedly originated the coal-promotion idea.

'Operation Northwest' a Hit

Philadelphia's experimental mass transit program—offering low 30-cent rail fares, frequent train service, and bus-to-rail transfers—has produced "extraordinary" results in its first three months of operation.

The experiment—which the city is subsidizing up to \$160,000 for a six-month period, to cover the costs of 218 additional trains a week—has so far:

- Brought the railroads 4,000 additional riders a week.

- Reduced automobile trips to and from the center of the city by 3,000 a week.

- Increased rail commuter traffic in the test area by 14.9 per cent at a time when other commuter lines have been experiencing a continuing 6 per cent drop in traffic.

Philadelphia City Solicitor David Berger released a three-month report on "Operation Northwest" based on figures submitted by the Urban Traffic and Transportation Board, the Phila-

delphia Transportation Co. and the Pennsylvania and Reading railroads.

"We are immensely pleased that the program is achieving the primary goal of reducing downtown traffic congestion," said Mr. Berger. "The results are extraordinary . . . The program has proved that people will use trains provided the fares are low enough and the service frequent. Undoubtedly extension of the plan to other commuter lines would rejuvenate them dramatically also."

He said that during a 14-week period beginning Oct. 26, 1958, the Reading and Pennsylvania had 984,328 riders on their Germantown-Chestnut Hill commuter lines—an increase of 127,784 over the number who normally would have ridden the trains. (The increase was on an adjusted basis taking into account factors of weather, holidays and the prior downward trend.)

He said the money put up by the city is not a subsidy to the railroads, but "more a subsidy to the commuters."

N&W, Virginian Push Merger

A spurt of activity on the railroad merger front has produced these late developments:

- Norfolk & Western and Virginian have worked out a basis for a merger that would save the two big coal haulers an estimated \$1,000,000 a month.

- Five new England roads have invited a sixth (Boston & Albany) to join them in a joint operating and engineering study. The five roads are the New Haven, Boston & Maine, Maine Central, Bangor & Aroostook and Rutland. B&A accepted the bid.

- The Eastern Railroad Presidents Conference has declined to undertake a study, proposed by the New York Central, of the possibility of merging eastern roads into three or four major rail systems. The NYC came up with the proposal after withdrawing from merger talks with the Pennsylvania.

The N&W-Virginian merger study was announced only last fall (RA, Nov. 24, 1958, p. 9). These two late-comers to the field now appear likely to reach the corporate altar ahead of some older candidates for consolidation.

A joint announcement by N&W President Stuart P. Saunders and Virginian President F. D. Beale said studies have shown that savings of \$1,000,000 a month can be realized through "elimination of duplicating facilities, more efficient use of motor power and equipment and economies in transportation and general expenses."

The merger plan would involve a

tax-free exchange of shares on the basis of 0.55 share of N&W common stock for each share of Virginian common. The N&W would issue 6 per cent, \$10 par cumulative non-callable preferred stock with voting rights. This would be exchanged for the outstanding Virginian \$6.10 par cumulative non-callable preferred stock with voting rights on a share-for-share basis.

C&O Starts TOFC Service In Two Passenger Trains

Piggyback trailers start moving this week in Chesapeake & Ohio passenger trains 1 and 2—the "George Washington"—between Staunton, Va., and Charleston, W. Va.

Trailers involved in this initial 233-mile move are owned by Smith's Transfer Corp. of Staunton. Other motor common carriers, C&O says, are expected to join in the operation later. C&O shops have converted 20 50-ft flat cars to handle the movement. Other cars will be added to the fleet as the service is expanded.

Negotiations have been completed between the railroad and the four operating brotherhoods involved—BLE, BLF&E, ORC&B and BRT—for an experimental period of six months during which employees will receive no extra pay for handling this piggyback move. It will be open for renegotiation at the end of the six-month period.



THIS IS

6583

THE IMAGE OF CF&I ...MAKER OF STEEL

He's a giant steelman. He makes good steel and steel products for the diversified needs of today's economy. He anticipates tomorrow's requirements. He is constantly improving products through research and new manufacturing techniques.

His steel mills extend across the country. In them, he guards every step of manufacturing by rigid quality controls. And in his national network of offices and warehouses, he not only *sells* steel products, but he *serves* their users in every possible way.

He is the dynamic image of CF&I... the symbol of dependable steel products. Look for him when you buy.

Plants at:

Pueblo, Colorado • Oakland and South San Francisco, California
Buffalo, New York • Claymont, Delaware • Palmer, Massachusetts
Birdsboro, Pennsylvania • Roebling, New Jersey • Trenton, New Jersey
40 Warehouses and 60 Sales offices located coast to coast

THE COLORADO FUEL AND IRON CORPORATION

DENVER • OAKLAND • NEW YORK



SP's Atoms Measure Diesel Wear

Use of radioactive tracer techniques is part of program of evaluating economy distillates and light residual fuels. The techniques cost less and work more quickly than previous ones. With them it is also possible to assess lubricating oil properties and engine conditions.

Radioactive tracer techniques are being used to measure diesel engine wear on the Southern Pacific. The techniques replace the previous costly and time-consuming measuring methods.

The new techniques are part of the road's program of evaluating the economy distillates and light residual fuels it has been using the past four years. Today, 140 SP diesel units have the special equipment needed for burning such fuels.

The tracer techniques have additional benefits. With them, it is possible to assess lubricating oil properties, air cleaners, engine conditions, parts metallurgy, and other factors directly affecting wear in the area of the engine piston rings.

This is true because the rings themselves, for testing purposes, are made radioactive in one of the two US nuclear reactors which have openings big

enough to receive them.

While they are being irradiated, some of the normal Iron-58 atoms in the piston rings absorb neutrons and are changed to atoms of the heavier isotope, Iron-59. This radioactive iron isotope is uniformly distributed through the ring. The amount of metal worn from the rings during normal engine operation is calculated by measuring the radioactivity of the diesel lubricating oil which carries the resulting minute metal wear particles. Wear is correlated with radiation levels.

Two GP-9 locomotives were used during a series of stationary tests at the San Francisco shop. Fresh oil was used for each new test run. The normal filtering system was by-passed so that no radioactive particles were removed from the oil by filtration during any test.

Used oil, when removed, was stored until its radioactivity had decayed to a

level which permitted its use in regular locomotives without any hazard. The oil being circulated through the test engines was continuously sampled and then passed through a counting well where Geiger tubes could measure its radioactivity as indicated by automatic recording clocks. An electronic computer was then used to calculate the rate of wear.

During the installation in the second ring groove (used in all diesel tests), the piston rings were not touched by hand. Everyone wore radiation exposure meters continuously while at the site of the experiments. During seven months of tests, no one received 100 milliroentgens of radiation—the maximum allowable dosage for one individual for one week.

This was true even after radioactive rings were installed in nine of the sixteen power assemblies instead of the four used in the initial phases of the tests. The nine rings insured greater test accuracy. It was found that the structure of the engine and locomotive gave enough shielding to permit the increase.

Calculations made after the tests, using statistical analysis, indicated that, with 90% confidence, a single run should be within plus or minus 16% of the true wear rate. With two runs, accuracy should be within plus or minus 11% of the true value, nine out of ten times. Test accuracy was greatly improved by increasing the number of irradiated rings from four to nine.

The radioactive test method has two disadvantages, according to the SP. It is impossible with the method to determine fatigue failure of parts and the effects of aging on lubricating oil. On the other hand, SP claims the method has the following advantages:

- Speed with which one variable can be compared with another, because wear rate for a given set of conditions can be established in 6 to 8 hr;
- Reliability of data, because variables can be isolated and evaluated;
- Multiple runs with greater resulting accuracy are possible because tests are short;
- Transient effects can be studied.



RADIOACTIVE RINGS were applied, and engine assembled, without hazard to personnel. Man at the right is holding a radiation-detecting device.



REPLACING FREIGHT CAR TRUCK is routine job for C&NW's new FWD wrecker truck. Chassis is a Model 6-366 with factory-installed air compressor and winch. Monorail

track was added by dealer in Ames on specifications of C&NW superintendent. Truck can handle a variety of assignments, including righting empty cars.

THIS WRECKER TRUCK . . .

Speeds C&NW Car Repairs

Chicago & North Western, dedicated to productivity of its men and machines, is getting just that from a specially designed wrecker truck assigned to its Iowa Division.

In its first 75 days of operation, the truck and its crew rewheeled 85 cars, rerailed 16 and rebrassed 7. They straightened eight shifted loads, loaded or unloaded uncounted pairs of wheels and even pulled down an unneeded depot. They traveled wherever they were needed on the 954-mile division.

The truck was built to the specifications of D. L. Perrin, Iowa Division superintendent, on the chassis of a six-wheel-drive truck manufactured by FWD Corporation. It resembles, in basic construction, a World War II bomb carrier—from which, in fact, Mr. Perrin got the idea for the 18-ft monorail which is fitted to the truck bed.

On the truck are a LeRoi air compressor of 125-cfm capacity, and a 45,000-lb Braden winch. Portable gear covers the range of necessary equipment from air and hydraulic jacks through chains and blocks to cutting

torches and a 1,500-amp auxiliary light plant.

When sent to derailments, the truck carries a replacement freight car truck. One carman is permanently assigned; others are assigned as needed.

The truck currently is at Eagle Grove. But even before it was completely equipped and assigned to Ames, its first home, a job was ready for it: picking up a tank car of asphalt which had overturned and blocked both main tracks at Marshalltown. The truck at the time was being finished at the FWD dealer's shop in Ames, 40 miles away.

Using the wrecker truck and two crawler tractors hired locally, C&NW forces righted the car and dragged it clear of the main line. The truck's air jacks were used to lift the car so its trucks could be replaced. A truck brought from Ames was substituted for the one which had broken and caused the derailment. The car was then winched back onto the rails. Total cleanup time: 4½ hours.

The wrecker truck has enabled C&NW to revise and hasten its handling

of cars set out with hotboxes. Formerly, the road replaced damaged bearings temporarily so that the car could be moved at restricted speed to a repair track. The process was slow, and often the temporary bearings themselves burned out on the damaged journal.

Now, however, the process is this:

When a train crew sets out a car with a hotbox, it notifies the dispatcher of the required wheel size. Replacement wheels are brought out by the wrecker truck and installed on the spot. The car then can be picked up by the next through train and forwarded with savings in both time and per diem.

The FWD wrecker truck can carry four pairs of wheels, or one complete truck and one pair of wheels. Its crew can change a truck in 50 to 75 minutes, and has done so in 35. Its six-wheel drive enables it to travel either along the right-of-way or over rough terrain to reach the point where it's needed. Highway speed is 55 mph. Mr. Perrin feels that the truck can handle 90% of all derailments. It can—and has—righted empty cars unaided.



SWITCH AND SIGNAL LEVERS are in two rows around console panel.

Switch levers are on top with signal levers below.

New CTC Speeds Freight

The Southern's fresh approach to CTC, utilizing alternate sections of one track and two track, reduces freight-train idle time. The new setup permitted removal of 80 miles of track.

Here's a description of the terrain involved and how the Southern handled the project.

The 150 miles between Atlanta, Ga., and Worley, S. C., had conventional double track with passing sidings. The sidings were equipped with hand-throw switches at the entering end and spring switches at the leaving end. Automatic signaling provided for unidirectional running on each main. Operation was by timetable and train order.

Many Curves Involved

This section of railroad was built with undulating grades diagonally across the watershed sloping southeastward from the Blue Ridge mountains. Curves are numerous, ranging from 3 to 5 degrees. The longest grade is about 1% for 15 miles.

The rail, for the most part, is 132 lb, and the track, ties, and ballast are well constructed and maintained. Maximum permissible speeds are 80 mph for passenger trains and 60 mph for freights. The signal system now in service, as well as the previous one, includes intermittent automatic train stop.

Normal daily traffic in the territory

includes 21 regular trains with extras and switch moves as required. Freight trains using 5 diesel units haul 7,500 tons southbound, 9,000 tons northbound.

The Southern describes as "two track" those sections of both main tracks signaled for bidirectional train movements. The sections were located with reference to where trains should meet and pass. They vary in length from 5 miles to as much as 13 miles through industrial switching areas, and 20 miles on grades. Seven of the 12 two-track sections have one or more double crossovers. Turnouts at crossovers and ends of two track are No. 20 with 39-ft curved points. These will accommodate train speeds of 45 mph.

Previously, freight trains had to clear passenger train time by 15 minutes. If the passenger was late, or long trains required sawing by, additional time was lost. Local freights and switch crews had to clear the main for first-class trains when switching industries, or the crews had to flag. Yard limits were established in these areas. Through trains other than first class had to operate at yard speed.

Now, all meets and passes are executed on the sections of two track frequently without stopping any train. Crews doing switching get exclusive use of one main track, while through trains operate on the other. Two ob-

jectives are thus attained: (1) Switch crews can work without interruption and without flagging; and (2) yard limits are eliminated so that road trains need not reduce speed. Similarly, in the 90 miles of two track, on-track power machines can continue to work while through road trains use the other main.

Turnouts leading to spurs or secondary tracks are equipped with electric locks. Automatic release of the lock is effected through use of high frequency overlay track circuits. These require no insulated rail joints, so that the coded track circuit continues uninterrupted.

Field Conditions Scanned

Electronic Syncroscan automatically and continuously scans field conditions at a rapid rate of 100 indications per second. It checks such items as switch position, controlled signal aspects and track occupancy, and controls indication lamps to correspond. Controls and indications may be transmitted simultaneously so that machine manipulation is never slowed down to wait for incoming indications.

The Trakode system employed in the new installation made local signal control wires unnecessary. Commercial power is readily available at numerous locations along the line. Hence, provision for only the two CTC code wires was required. As microwave may some day be substituted for the communication pole line, the idea of placing the code wires on the pole line was discarded. The code circuit was, therefore, placed underground in two-conductor No. 10 cable throughout the 150-mile project. The old signal pole line, with its a.c. power distribution system, was removed.

Safety detectors, of the self-restoring type, are in service on both main tracks at three locations. When dragging equipment operates a detector, a special aspect is displayed on a signal ahead of the train. An approach aspect is provided.

The control machine for this new Southern project was designed to be compact and easy to manipulate. The illuminated track diagram is a separate large-sized panel mounted 8 ft above the floor, about 5 ft from the dispatcher. The levers are mounted at a sloping angle on the dispatcher's desk. Automatic train graphs are counter-sunk in the desk top.

This new single-track, two-track arrangement was conceived and handled by the operating department of the Southern. The CTC was planned by the Southern's signal department, and the General Railway Signal Company furnished the equipment.

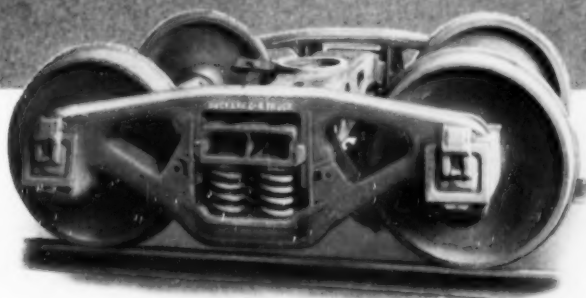
Get Longer Service Life!

with



BUCKEYE C-R[®] TRUCKS (CUSHION-RIDE)[®]

Built-in protection against wear or breakage of friction control parts is one of the outstanding features of the Buckeye C-R (Cashion-Ride) Truck. The use of highest quality spring and friction part materials plus the provision of maximum friction bearing areas greatly extend service life and reduce maintenance costs. Periodic inspections made after service up to several hundred thousand miles indicate that the Buckeye C-R (Cushion-Ride) Truck and friction parts should last the life of an average freight car.



FOR COMPLETE INFORMATION . . . CALL OR WRITE.
Refer Ad 11883



Cast Steel INCORPORATED DROP END UNITS

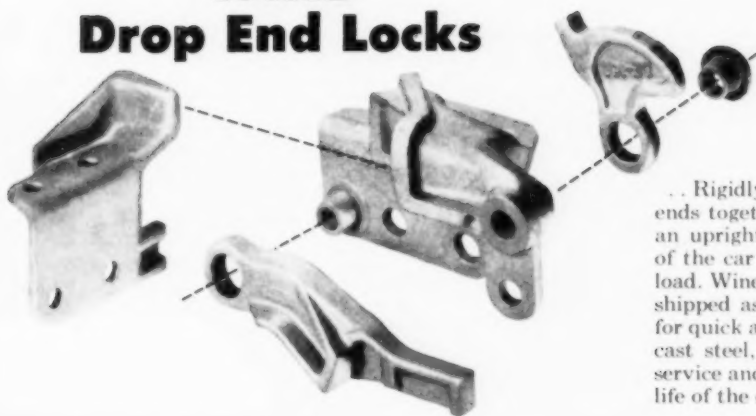
Speed



Service.. Sustain Structure

For outstanding economies . . . increased safety factors . . . improved strength and durability for the life of the car—Wine Drop End Units (Locks and Balancers) form *the perfect combination!*

WINE Drop End Locks



... Rigidly interlock gondola sides and ends together—securing the ends in an upright position. Top corners of the car cannot spread regardless of load. Wine Drop End Locks are shipped as an assembled unit, ready for quick application. Made of electric cast steel, they insure maximum service and durability throughout the life of the car.

WINE End Balancers

... Eliminate the necessity of using *four or five men* to close a drop end for car loading! Multiple spring steel torsion bars, incorporated between the center casting and the two outer hinge trunnion castings, permit *one man* to readily close the heaviest drop ends without assistance. Available for easy application on most drop end gondolas.



THE WINE RAILWAY
APPLIANCE COMPANY
TOLEDO 9, OHIO

New Products Report



Cradleclip Wiring

The Insuloid Cradleclip wiring system is claimed to reduce wiring time by as much as 52 per cent. The system consists of binders and endless extensible clips for unsupported wiring, and cradles and endless extensible clips for supported wiring. Clips and cradles provide secure fastenings for cable or wire runs ranging in diameter from 3/16 in. to 2 1/4 in. *Western Railroad Supply Co., Dept. RA, 2742 West 36th Place, Chicago 32, Ill.*

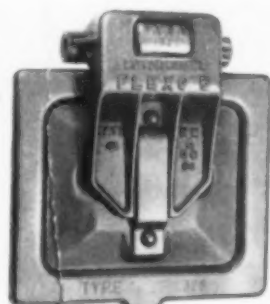


Midget Pliers

A new line of pliers designed for delicate work in confined space, such as wiring amplifiers or electronic assemblies, measure from 4 in. to 4 1/2 in. long. Four models are available: 257-4 oblique cutting plier; 321-4 1/2 long-nose plier; 322-4 1/2 long nose plier with knurl; and 224-4 1/2 end cutting plier. All are available with a coil spring to keep jaws open. *Mathias Klein & Sons, Dept. RA, 7200 McCormick Road, Chicago 45.*

Flashlight Cell

A new "D" size flashlight cell has the double protection of a leakproof steel outer jacket, plus internal chemical chrome coating. By coating the cell's zinc anode with a chrome film, chemical dissipation of the anode is prevented when the battery is not in use. The film is penetrated by current drawn from the battery as it is used, but re-forms quickly when the battery is idle. *Burgess Battery Co., Dept. RA, Freeport, Ill.*



Journal-Box Lid

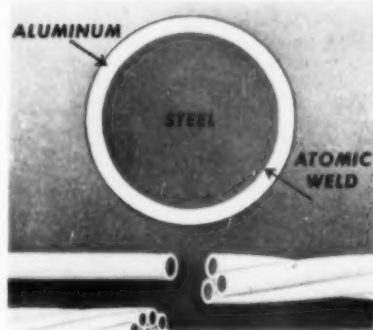
The Flexo 5 composite journal-box lid is for use either on integral or separable journal boxes. It has a malleable cast-iron hood and a flanged, reinforced pressed-steel cover. Its full four-way articulation permits lids to self adjust and compensate for hinge-pin wear and variations on the journal-box face. The lid has been approved and certified by the AAR. *Motor Wheel Corporation, Dept. RA, Lansing, Mich.*



Easy Lamp Installation

New-design Hope lamp bases become custom uprights when standard conduit or pressure pipe is cut to desired length and threaded into base. Four sizes are available: 2 in., 2 1/2 in., 3 in. and 4 in., in galvanized or unfinished malleable iron. A new feature is an optional integral junction box, protected by a spring-loaded weatherproof cover. This provides a convenient power source for tools and accessories or auxiliary lighting. A removable cover in the base provides access to the junction chamber and greatly simplifies wiring installation and maintenance.

Great Northern recently installed 10 2-in. Hope bases at the Chinook, Mont., station for use with a 10-ft galvanized upright. GN reports: "the primary reason for using the Hope device instead of a standard floor flange was . . . [the] handhole, which greatly facilitates wiring and maintenance." Manufacturer's suggested applications: for lighting platforms, crossings, parking lots, for yard speakers, signs, etc. *Hope Electrical Products Co., Dept. RA, 39 Long ave., Hillside, N. J.*



Steel-Core Aluminum Wire

A new steel-core aluminum wire and strand called Alumoweld, represents the successful application of a thick cladding of aluminum to steel by an atomic weld. Employing heat and pressure, this process inseparably welds aluminum to steel so that the two metals act as one when the bimetallic rod is drawn into wire. One-quarter aluminum by area, it yields an electrical conductivity of 33 per cent. *Copperweld Steel Co., Dept. RA, Glassport, Pa.*

EMD Aims to Cut RR Paperwork

Proposed new invoicing system would eliminate 75% of invoices EMD now issues for diesel locomotive parts. About 20 railroads already have indicated they would welcome introduction of the new system.

A simplified invoicing system that could reduce railroad accounting and clerical costs has been evolved by General Motors' Electro-Motive Division.

The new system promises to eliminate at least 75% of the invoices EMD currently issues for diesel locomotive parts. The primary instrument in the paperwork-cutting proposal is known as DMOI—Daily Multiple Order Invoice.

R. J. Hondlik, manager of EMD's diesel parts sales, explained the operation of the proposed system by showing examples of actual orders received, filled and billed. Handled in the usual manner, the orders required 57 separate invoices. Had the orders been processed by the DMOI method, only 15 invoices would have been needed.

Here is how a representative DMOI form would be prepared. Each day, EMD's order billing department receives so-called shipper forms from the LaGrange, Ill., parts department and from the eight branch locations. Under the proposed setup, as these forms arrive they would be sorted according to the railroads placing the orders.

EMD's data-processing force would then punch the information on the "shipper" forms onto IBM cards, railroad by railroad. A typical card would carry, for example, the railroad's order number, the order date, the quantity ordered, the item description, the shipping date, the destination, the branch which received the order, the branch or branches which filled the order, the method of shipment, and unit and total costs. The card would carry everything which appears on the invoice form except the sub and grand totals.

Suppose the DMOI system is in actual operation and that we are watching EMD's data processing force process a day's accumulation of "shippers." Suppose, also, they have just completed punching cards for "shippers" received that day covering shipments to one railroad.

The cards are first sorted according to the destinations to which the orders were shipped—usually major diesel stores points. Each stack of cards is fed into an IBM computer along with master cards which contain the name of the railroad, the destination, date of

invoice, code numbers, invoice number, etc. An IBM printer then prepares—directly on DMOI forms—a multiple-copy invoice showing all the information on the cards, as well as the price sub-totals (totals per order number) and the grand total representing all material covered by the day's "shippers" for one railroad at each particular location. Forms prepared for other destination points on the same railroad follow and are then combined—one sheet (or set of sheets) for each location.

This operation would be carried on each day—and night. For some larger railroads, the system would produce

one diesel parts invoice per day throughout the year. Smaller roads, with fewer and less frequent orders, would be billed only when shipment reports arrive at LaGrange.

Electro-Motive has over 225 domestic diesel parts accounts. The more of these that accept the new invoicing proposal, the more efficient the operation will be. At this writing, according to Mr. Hondlik, EMD has been assured by some 20 roads that they would welcome the introduction of the new system.

"But right now it's still just a proposal," Mr. Hondlik says. "There are
(Continued on page 26)

What Some Purchasing Agents Think of the EMD Proposal

"We in the railroad field are extremely anxious to reduce paperwork as much as possible. Electro-Motive's decision to issue cycle invoices is certainly a move in the right direction. We hope the cycle can be extended to weekly billing in the near future."—*F. J. Steinberger, general purchasing agent, Santa Fe.*

"We have been consistently and strongly urging Electro-Motive for more than a year to put in some form of cumulative or multiple invoicing. EMD's latest proposal has been the so-called Daily Multiple Order Invoice. It is essential, so far as the Missouri Pacific is concerned, that some type of multiple invoicing be placed into effect immediately."—*H. M. Hoffmeister, general purchasing agent, Missouri Pacific.*

"The DMOI proposal is basically sound. It might need some modification to meet the requirements of individual railroads. There is no question but that it will save the railroads considerable paperwork."—*J. T. Healy, general purchasing agent, Louisville & Nashville.*

"We are hopeful that DMOI will contribute substantially to a reduction in the ever-increasing volume of paperwork."—*W. E. Smallridge, director of purchases, Northern Pacific.*

"As we see it, the proposed plan will somewhat reduce the total number of invoices for diesel parts. This improvement could be greatly augmented if EMD would agree to issue separate weekly, semi-monthly, or monthly invoices for all shipments made to each receiving point."—*S. R. Secor, general purchasing and stores officer, Chesapeake & Ohio.*

How you can plan right now to **SAVE \$288,**

A practical "Roller Freight" plan

The railroads will save an estimated \$288,000,000 a year in operating and maintenance costs—or \$144 per car—when all freight cars are "Roller Freight" . . . roll on roller bearings. They'll have modern rolling stock to give even more dependable service, get more shipping. And here's a practical plan, ready now.

Why not get together with other railroads and *plan* your roller bearing purchases. Order a specified number each year. That gives you an equitable proportion of "Roller Freight" cars yearly. Sharing them in interchange will speed the day when all railroads will get full benefits. And earn a good return while doing it.

This plan helps the railroads two ways. 1) By putting cars on roller bearings regularly they'll keep bearing costs at a minimum. 2) They can set up economical shop schedules for conversion to roller bearings, further reducing costs.

Revolutionary plant makes "Roller Freight" even more practical

The Timken Company's new, highly mechanized railroad roller bearing plant (partial view right) makes this savings plan possible. It can turn out 20,000 car-sets of Timken® "AP" heavy-duty roller bearing assemblies a year. (See view below, right).

The costs of friction bearings and other things railroads buy have climbed rapidly. But the cost of the Timken bearings for freight car applications is less than it was 10 years ago! Planned, regular purchases to keep this new plant in production will help *keep* bearing costs down.

Already 76 railroads and other car owners have over 27,426 freight cars on Timken tapered roller bearings. As they put more new and older cars on Timken bearings, the savings will mount. Why not plan your "Roller Freight" program now—start your savings rolling? The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ont. Cable address: "TIMROSCO". *Makers of Tapered Roller Bearings, Fine Alloy Steels and Removable Rock Bits.*

PROOF OF PERFORMANCE . . .

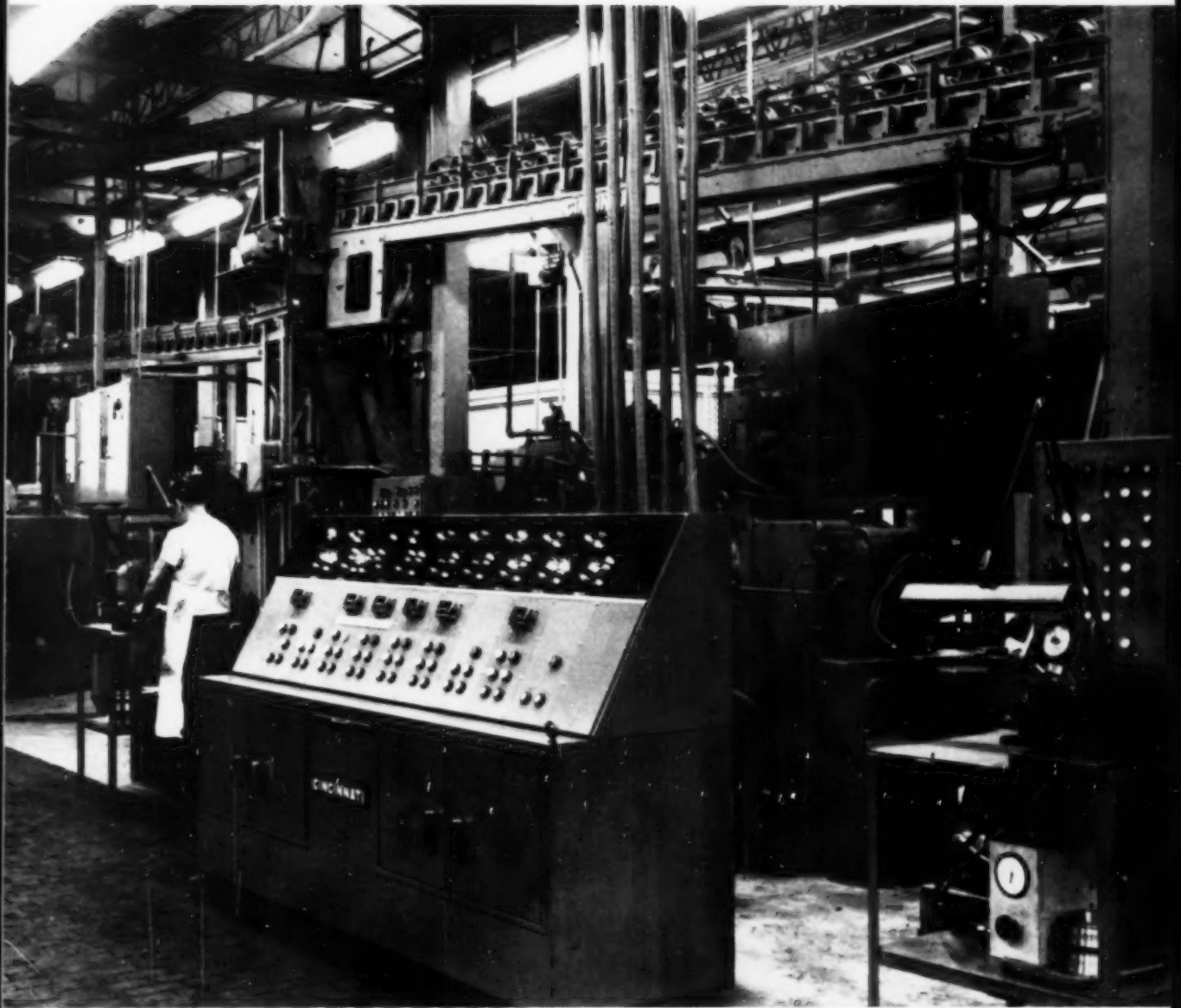
One railroad's freight cars equipped with Timken roller bearings rolled over 300,000,000 car-miles with only *one* overheated bearing.

*The **taper** makes Timken the only journal bearing that delivers maximum economies.*

BETTER-NESS rolls on

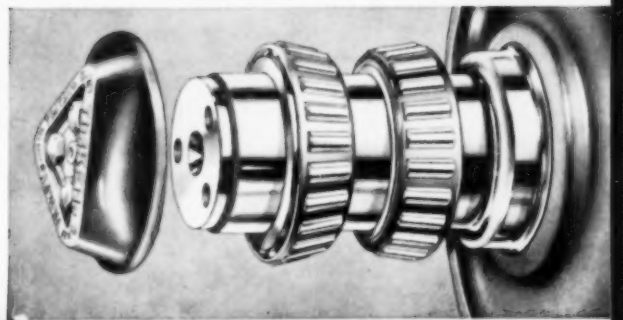
TIMKEN®

go "Roller Freight" at low cost
000,000 A YEAR



tapered roller bearings

First in bearings for 60 years





DMOI FORMS would be prepared on IBM processing equipment. A 650 computer would furnish data to a printer like the one above. The printer would prepare the invoice forms.

EMD WOULD CUT PAPERWORK

(Continued from page 23)

a lot of railroads we haven't even talked to about it as yet. A few have expressed disagreement with the proposal. For example, one road files its purchase orders in drawer files and then, when invoices come in, they are attached to their respective purchase orders. Naturally, this would not work with DMOI, since one invoice might cover many purchase orders. A cross reference on the purchase order will cover this, however."

EMD has indicated the DMOI proposal can be put into operation as soon as the majority of railroads accept it. Without such acceptance, it would not be economical to make the change. Additional people and specially designed equipment would be added to EMD's present setup.

"The end result of the DMOI plan," Mr. Hondlik points out, "would be a

big reduction in paperwork, which could reduce the railroads' accounting and clerical costs proportionately. We think it has great possibilities. Once started, we predict it will gain total acceptance and eventually will be worked in with punched-card purchase order procedures. Then, we'll really have something!"

EMD, incidentally, is working toward simplification of its own accounting and inventory control operations. The operations are, to a certain extent, necessarily tied in with railroad accounting procedures. The division is considering the acquisition of an IBM 705 computer and the installation of a punched-card-tape-Teletype network linking its eight branches and the La-Grange accounting department. The aim is faster service to customers and more efficient processing of forms. A key factor in the decision to simplify is the increasing adoption by railroads of punched-card order forms for diesel parts purchases.

Railroading



After Hours with

Jim Lyne

OVERFED TRAFFIC MEN?—Not long ago the chairmen of the three territorial traffic associations (R. E. Boyle, E. V. Hill, T. H. McGuire) wrote a joint letter to the Associated Traffic Clubs, suggesting that all annual dinners of local traffic clubs be held on the same date. A prominent shipper has replied to the chairmen, endorsing the proposal, but going one step further. He wants these festivities cancelled altogether. He contends that they foster overfeeding of traffic men.

Seems to me that going from too many feasts to a complete famine would be a little abrupt.

EASIEST RIDING TRACK—I'm still trying to find out what kind of ballast the experts consider the best; and what's the longest haul ballast gets in this country. As for what railroads are using for moderate-cost ballast to take the place of cinders, one report is that it's slag. That may be all right for some roads, but there must be a lot of them on which it is not available.

The same informant who told me about the increased use of slag also had something to say about the best riding track he'd found. Anybody care to guess where it is? And are there any other nominations? I know of several stretches of track in this country that strike me as practically perfect—but I wouldn't like to mention them without getting other suggestions.

ADULT EDUCATION—President Norris Crump of the CPR has given me a mimeographed copy of a thesis he wrote back in 1936, entitled "Internal Combustion Engines in the Railroad Field." This thesis he presented to Purdue University "in partial fulfillment of the requirement for the professional degree of mechanical engineer." A highly experienced steam locomotive

man at that time, Mr. Crump had no prejudices against a newer form of power. Quite the contrary—and, as things turned out, his interest was prophetic.

Incidentally, when this thesis was written the author was located out in the wide-open spaces—few libraries available. So most of his references were from the technical magazines—including *Railway Age* and our associated publication, *Railway Mechanical Engineer* (now *Railway Locomotives and Cars*). When a serious student can satisfy the requirements of such an institution as Purdue from information gleaned largely from the railway press—I'd suppose that ought to give at least a passing mark to the magazines.

COMPETITION IN EUROPE—President William White of the D&H has shown me a clipping from the *London Times*, indicating that the British railways are having a tough time of it with truck competition (private trucks especially), and are stepping up their service to improve their hold on traffic. Considering the average length of haul of freight in Britain, it isn't to be wondered at that the trucks give the railways a hard time. On the other hand, the British railways now enjoy freedom in rate-making, which in due course should be highly helpful to them. Anyhow, in France and Holland, where rate freedom has existed for a longer time, there doesn't seem to be much further diversion away from the rails.

The railroads in the US probably have a much greater economic advantage (costs per ton-mile) over the trucks than the European railways—but this advantage is more than offset by the severity of regulation in this country. It is a paradox that the one country in the world that has 100% private enterprise in railroading also has the most rigid restrictions on management.

UP Terminal Gets a New Look

The \$10,000,000 "face lifting" of Union Pacific's Albina freight terminal at Portland, Ore., is progressing rapidly and scheduled for completion by the end of this year.

Work on the project began two years ago with 600,000 yards of dirt fill (RA, June 10, 1957, p. 17).

The new switching yard will have six tracks, 1½ miles long, for handling inbound and outbound trains and three long systems of classification tracks. Most buildings in the yard will be new and all rail will be replaced or relaid.

The largest of the 20 new buildings will be the 170-by-1000-ft freight station, capable of handling a 90-car freight train under one roof. Attached to the south end of the station will be a 150-by-160-ft office building.

In the new Albina freight house, to be completed this summer, a covered loading dock will be long enough to accommodate 144 trucks. Less-than-car-load merchandise will be moved from box cars to the dock in carts pulled by an under-floor conveyor chain. A truck loading platform on the north end of the building will have a 40-ton gantry crane to handle heavy loads.

Freight checking will be speeded by portable talk-back speakers.

Among other buildings to be constructed this year are a 100-by-1000-ft freight-car repair shop; a 100-by-220-ft car department and supply building;

and an 80-by-200-ft mill and black-smith shop.

The car shop will have three rip tracks, two wash tracks and one stripping track. The tracks will hold an average of 60 cars each.

Part of the former machine shop is being converted to service diesel freight and passenger engines. The mechanics will work from elevated platforms and inspection pits.

Eighty per cent of the track work is finished. The yard, which is a flat 1.8 miles long, will have a switching capacity of 3,280 cars.

Albina's new control center, placed in operation last year, includes two 42-ft yard towers and a brick and glass terminal superintendent's building, all air conditioned. A speaker system covers the entire yard.

An integral part of the new look at Albina are the electronic transceivers that transmit and receive freight shipment data with great speed and accuracy. These IBM machines, located in the main yard office, are connected in a transceiver network that covers the Union Pacific system from Portland to Salt Lake City, Los Angeles, Denver, Omaha, and Kansas City.

A transceiver can supply information on a stack of punchcards in a matter of a few minutes, and long before the freight train arrives at the next terminal, the yardmaster has already planned his switching moves.



BRAINS of UP's electronic network for fast transmission of freight car data is this IBM transceiver.



TWO-WAY SPEAKER BOX is a big timesaver in working out switch lists with yardmaster in tower.



HUGE FREIGHT STATION at Union Pacific's Albina yard in Portland can handle a 90-car train under one roof.

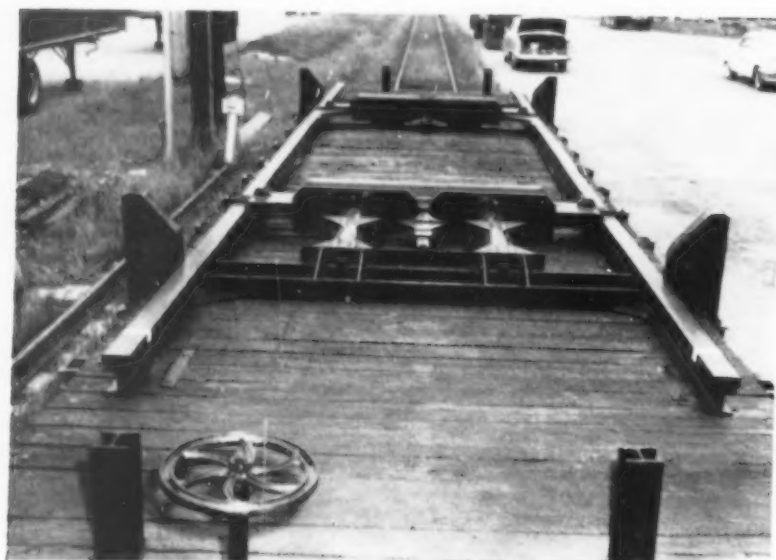


LOCKED ON CHASSIS, MP container is ready for highway trip.

MP Gets Set for Perishables



CRANE TRANSFERS reefer unit from truck to car by pushbutton.



NEW CRADLE CAR handles MP containers up to 37 ft long.

A new tap on perishable traffic moving to market from Texas points is being readied by the Missouri Pacific.

The road is currently taking delivery from Trailmobile of 100 mechanically refrigerated containers (35-ft) and 50 highway chassis.

Reefer boxes will be transferred between highway and rail car by special design gantry cranes. The cranes, a trademark of MP's piggyback operations, are already located at 18 shipper centers, serving more than 250 stations in nine states.

Missouri Pacific's new refrigerated containers can be handled on a conventional flat car or on the road's own "cradle car"—designed specifically for container units.

On a conventional flat, the reefer box is secured by chains to a buffer arrangement of rubber springs at the flat car's corners. The boxes are equipped with two rail skids, one running lengthwise on either side.

The container skids on its rails to absorb shock.

On the "cradle car" the reefer unit rests on a cradle and is free to move up to eight inches in either direction to dampen impacts. This movement is restricted by rubber shocks. The container attaches to the car by a nesting and anchoring arrangement.

Unlike dry-cargo containers used by the MP, the reefer units have six inches of insulation all around—foam plastic beneath floors and Fiberglas in walls and ceilings. A plastic covering protects walls. Floor design admits a cross flow of air to supplement the normal longitudinal flow under the payload. According to the builder, this means greater cargo protection.

Temperatures inside containers can be held at -10 with 100 degrees F ambient, and on the warming cycle, at 50 degrees with zero ambient.

Mechanical cooling units on the new containers are propane driven. Two 45-gallon tanks are mounted at the front of each container.

For over-the-road movement, containers secure to highway chassis by six clamping devices located beneath the rig. Each special chassis is equipped with a sliding tandem axle to meet differing highway restrictions in various states.

The chassis is also equipped with chain anchor bars so the complete container and chassis can be carried on a flat car in conventional piggyback.

Drivers Fight Shift to TOFC

Teamster members, battling for job security, are trying to stem the tide of piggyback. Grievance cases are pending in two areas.

► **The Story at a Glance:** Over-the-road truck drivers are growing wary of their employers' increasing use of piggyback. Two grievance cases now on file could affect future TOFC operations in some 24 western states.

In each case, Teamster drivers are fighting for job security. And the trucking companies are fighting for the right to exercise what they feel is a management prerogative—piggybacking trailers where it's more economical to do so.

On the West Coast, Teamster truck drivers are opposing their company's proposal to piggyback five bid runs now handled over the road. In the Midwest, some 40 drivers are contending that they are entitled to a cross-country haul—or that they're entitled to be paid in the event the haul is made via rail trailer-on-flat car service. Both cases involve Consolidated Freightways, one of the nation's largest common carrier truckers and one of the largest users of piggyback.

The West Coast case has gone to a labor arbitrator. The Midwest case will go before a Joint Area Committee March 18-19 in Chicago. It, too, could reach an arbitrator in the event the management-union committee can't come to an agreement.

On the Coast, CF is proposing to cancel five bid runs and replace them with TOFC service between California and the Pacific Northwest (CF is already moving some 700 trailers a month on the north-south route via Southern Pacific).

According to a CF officer, only about 15 jobs would be affected. A union report contends that the move could idle 200 to 300 men—a figure apparently reflecting the union's assumption that CF may intend to abandon its whole north-south highway operation.

CF, however, points out that its proposed shift to piggyback involves only through runs, that no division points will be eliminated. A complete shift to TOFC for north-south operations, CF declares, "would be impossible."

The Midwest case has different aspects. Here the company and about 40 drivers are differing over the company's right to piggyback "one-way" traffic—and over layoffs which the drivers blame on this piggyback move.

The company contends that the drivers were furloughed because of a January slump in business, not because piggyback has taken the traffic.

Although it's not a specific point in either case, the basic issue appears to center on the trucking industry's ability to convert to another type of transportation where it's economically advantageous to do so.

"As far as the motor carriers are concerned," an Illinois trucking association officer declared, "this decision could have a serious effect on piggyback operations."

Roy M. Pride, manager of the labor relations department of the Central Motor Freight Association of Illinois, described the situation this way:

"If this move were balanced, there probably wouldn't be any argument. It would go over the road. But the move is over-balanced at one end . . . and there's no merit in running a driver west and having him return empty."

"This is a test case as to a motor carrier's ability to use piggyback in these circumstances. It used to be clear-cut, but piggyback is growing, it's mushrooming. The union people think they're getting hurt. Our contention is that we have the right to do what we're doing."

According to Mr. Pride, two factors are involved:

- The economics of the situation—a trucker's right to move his freight as cheaply as possible.

- The seniority issue—are the truckers stuck with all men who achieve seniority, are the companies bound to give the drivers anything that might come up? Seniority can be attained after 30 days' employment—and a contract clause provides that "seniority shall be broken only by discharge, voluntary quit or more than a two-year layoff."

No contract provision covers piggyback operations, except that "the union reserves the right to re-open this agreement for the purpose of negotiations for employees engaged in operations which combine with or are part of other methods of transportation such as 'piggyback,' barge, etc."

As for the West Coast case, CF Vice President Vince Graziano contends that the company "has no agreement on piggyback with the union . . . We've

been running piggyback for more than a year and there's never been any agreement whatsoever at any time."

The stakes, for both truck operators and drivers, are big. In the Midwest, for example, wage rates have gone steadily up—to a point where drivers operating sleeper-cab rigs may earn an average of \$12,000 per year and individual drivers' wages may run as high as \$17,000 per year. Operators in some areas are plagued with an imbalance of traffic—and, it's reported, they've found it cheaper in many cases to route that type of traffic via piggyback.

Thus far, truckers don't appear to view the drivers' demands as featherbedding. It's the Teamsters' position that they're entitled to the haul or payment if the traffic moves any other way. But, one management officer commented, "we don't consider that in the nature of the make-work rules such as you're talking about on the railroads . . . although it could step over to that, I suppose, in time."

The Teamsters as an organization appear to have a stake in these cases beyond the welfare of a comparative handful of drivers. They're protecting a contract—the over-the-road agreement—which has been the backbone of the union, a potent force in the growth of the organization.

At least one top union officer, however, appears to see change coming—and to recognize the need for keeping management-labor relations up-to-date. The officer promised to push the drivers' case for compensation, but he added that "we realize we can't halt progress and we'll have to make some concessions."

Under the terms of the contract covering the 13-state Midwest area, the drivers' grievance against CF first went to a Joint State Committee. Deadlock in the state board brought the case before the area group. The area committee can come up with a decision at its March meeting—or it can hold up a ruling pending further study. Under the contract, deadlocked cases may be submitted to umpire handling if a majority of the Joint Area Committee favors such a move. Thus far, there's never been a case arbitrated in that way in the central states area—but, one observer commented, "this one may go that way."



LVTP-5 amphibian tank

Demountable truck body

New York Central coach

New York Central caboose

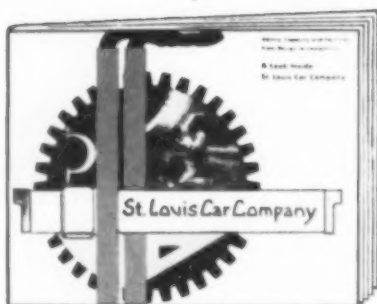
Pennsylvania-Hudson & Manhattan rapid transit car

Radar antenna mount

Specialized packing and shipping container

Any equipment you may need

ST. LOUIS CAR CAN BUILD



free... write for your copy of this informative 20-page photo-brochure. It shows our equipment and facilities and the versatility of our production program.

St. Louis Car Company

8000 North Broadway • St. Louis 15, Mo.

BRANCH OFFICES in New York, Washington, Cleveland, Detroit and San Francisco.

MARKET OUTLOOK *at a glance*

Carloadings

Carloadings for the week ended Feb. 21 were not available as this issue went to press.

Loadings of revenue freight for the week ended Feb. 14 totaled 567,134 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS For the week ended Saturday, Feb. 14			
District	1959	1958	1957
Eastern	87,604	82,292	114,407
Allegheny	101,608	91,697	131,401
Poconchos	50,839	46,596	59,182
Southern	111,803	106,515	129,551
Northwestern	60,252	58,915	73,739
Central Western	109,438	102,090	114,113
Southwestern	45,590	45,081	53,573
Total Western Districts	215,280	206,086	241,425
Total All Roads	567,134	533,186	675,966
Commodities:			
Grain and grain products	52,703	48,706	52,138
Livestock	4,117	4,323	5,616
Coal	113,434	112,302	132,973
Coke	9,059	7,212	13,830
Forest Products	36,250	35,001	42,943
Ore	15,135	14,533	22,959
Merchandise l.c.l.	42,686	45,487	56,194
Miscellaneous	293,750	265,622	349,313
Feb. 14	567,134	533,186	675,966
Feb. 7	565,397	532,396	665,251
Jan. 31	582,636	550,532	647,972
Jan. 24	555,547	551,088	665,745
Jan. 17	586,254	572,886	657,269
Cumulative total, 7 weeks	3,874,757	3,782,179	4,554,170

PIGGYBACK CARLOADINGS.

U. S. piggyback loadings for the week ended Feb. 14 totaled 6,818 cars, compared with 4,388 for the corresponding 1958 week. Loadings for 1959 up to Feb. 14 totaled 44,789 cars, compared with 30,341 for the corresponding period of 1958.

IN CANADA.—Carloadings for the seven-day period ended Feb. 14 totaled 65,695 cars, compared with 65,767 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
Feb. 14, 1959	65,695	28,047
Feb. 14, 1958	66,919	29,210
Cumulative Totals:		
Feb. 14, 1959	412,275	169,075
Feb. 14, 1958	421,517	185,265

New Equipment

► **Last Week's Orders.**—Orders for new equipment costing some \$100,662,000 were reported to Railway Age in the past seven days. The breakdown:

FREIGHT-TRAIN CARS

► **Katy.**—Ordered 25 bulk end flat cars from Thrall for use in wallboard loading. The cars are of special design equipped with roller bearings and malleable steel floors.

► **Milwaukee.**—Ordered 50 70-ton, 60-ft flat cars from Thrall. Delivery will be made during the second quarter.

► **PRR Places \$100 Million Car Order.**—The Pennsylvania has just announced one of the largest single freight car orders in recent years. The 11,500 cars, to have more than 80 per cent new material, are being built in Altoona, Pa., at an approximate cost of \$100,000,000. Included are 5,300 gondolas, 4,900 box cars, 500 stock cars, 300 flat cars, and 500 covered hoppers. The covered hoppers already have been completed. Most of the equipment will be in service this year. The road also is continuing its program of heavy repairs to about 25 cars a day, according to an announcement last week.

► **Repair Ratio 3.5% Higher Than Last Year.**—Class I roads on Feb. 1 owned 1,724,095 freight cars, 24,707 less than a year ago, according to AAR report summarized below. Repair ratio was 3.5% higher than on Feb. 1, 1958.

	Feb. 1, 1959	Feb. 1, 1958	Change
Car ownership	1,724,095	1,748,802	-24,707
Waiting repairs	153,431	94,947	+58,484
Repair ratio	8.9%	5.4%	+ 3.5%

LOCOMOTIVES

► **Locomotive Ownership and Condition.**—Steam locomotives owned or leased by Class I roads on Jan. 1 totaled 1,284, a drop of 1,060 from Jan. 1, 1958, according to AAR quarterly summary; diesel ownership rose by 399 units and electric units declined.

	Owned or Leased January 1		Stored Serviceable January 1		Waiting Shops January 1	
	1959	1958	1959	1958	1959	1958
Diesel (Units)	27,744	27,345	401	531	1,389	1,038
Steam (Locomotives)	1,284	2,344	409	976	571	503
Electric (Units)	559	587	65	24	76	67

Orders and Deliveries

► **Orders Increase.**—Orders were placed in January for 4,007 new freight cars, compared with 3,830 in December. Freight Cars ordered in January 1958 totaled 401. Deliveries in January totaled 1,940 freight cars compared with 2,621 in December and 7,219 in January, 1958. The backlog of cars on order and undelivered as of Feb. 1,

(Continued on following page)

MARKET OUTLOOK (continued)

1959, was 29,470, compared with 27,596 on Jan. 1, and 48,787 a year ago.

Type	Ordered January 1959	Delivered January 1959	Undelivered February 1, 1959
Box-Plan	2,186	241	10,648
Box-Auto	0	0	500
Flat	209	546	1,749
Gondola	0	257	2,446
Hopper	930	452	11,384
Cov. Hopper	162	179	502
Refrigerator	200	85	1,200
Stock	0	0	0
Tank	148	176	721
Caboose	64	1	138
Other	108	3	182
Total	4,007	1,940	29,470
Car Builders	1,069	982	8,448
Railroad shops	2,938	958	21,022

New Facilities

► **Canadian Pacific.**—Is undertaking grade separation and line relocation work in the vicinity of St. Johns, N.B., in preparation for construction, possibly next year, of a new freight yard at that point.

► **Chicago Transit Authority.**—Began construction of a \$90,000 island platform at Forest Park, Ill., terminal, as the first step in providing for interchange of passengers between CTA and Chicago, Aurora & Elgin.

► **Lackawanna.**—Ordered from Union Switch & Signal Division of WAB Co. 93 sets of intermittent inductive train stop equipment for installation on diesel locomotives already equipped with Union cab signaling. The new equipment is necessary to permit operation of DL&W trains over Erie tracks between Binghamton and Corning, N.Y.

► **New York City Transit Authority.**—Ordered more than \$3.5 million of signal equipment from Union Switch & Signal Division of WAB Co., to be installed as part of the modernization program on the Lexington avenue 4-track IRT line between Astor Place and Wall street.

► **Norfolk & Western.**—Will have 48 diesel-electric locomotives equipped with Motorola 64-volt radio. Transistor power supplies enable the radio to operate directly from the locomotives' batteries. These engines are being built by Alco Products, Inc.

► **Santa Fe.**—Will build new freight house, terminal office building, garage, repair shop and piggyback facilities for both railroad and trucking subsidiary operations at Kansas City, Kan. Total cost will be more than \$4,000,000. Construction is expected to begin late next spring. Completion should be early in 1960.

► **Southern Pacific.**—Ordered equipment from Union Switch & Signal Division of WAB Co. to install a CTC system on 145 miles of single track extending from Lordsburg to Anapra, N.M., just outside of El Paso, Texas. This is an extension of the CTC now being installed between Lordsburg, N.M., and Mescal, Ariz., a distance of 125 miles. These installations will be controlled from a machine at Tucson, Ariz.

This Month

Highlights from other railway publications of Simmons-Boardman for March

DIESEL LUBRICATING oil may look highly promising in a test tube. The final and crucial test, however, is its performance in the engine. A noted authority on diesel lubricant research explains how test lubricants are subjected to accelerated engine tests to determine their good and bad properties.

—**Railway Purchases & Stores**

CONTROLLING the turbine and electrical equipment of the UP 8,500-hp gas-turbine locomotive presents problems which have been solved with an arrangement which is also easier to trouble-shoot and maintain.

—**Railway Locomotives & Cars**

PLASTIC CABLES for communications circuits are receiving wider acceptance on railroads. They are being used extensively in modern retarder classification yards for talk-back and paging speaker systems. One advantage is that plastic cables can be buried directly in the ground.

—**Railway Signaling & Communications**

TRAFFIC CONTROL require transmission of data to and from the CTC machine and the field locations. One type of CTC control is a synchronous system using relays and transmitting a polar code. An indication system used with this type of control is a continuously scanning, electronic system. The control office calls the roll of all field locations in sequence, using one frequency, and they answer using another frequency. Block occupancy indication and analog data transmission systems may also be used to supply information to a dispatcher at a central location.

—**Railway Signaling & Communications**

TRESTLE REPAIR COSTS on the Central of Georgia are being reduced by a three-pronged formula. It involves mechanization of B&B gangs with specially tailored equipment, rigid inspection to determine the amount of work to be done, and precise scheduling of work programs.

—**Railway Track & Structures**

RECENT ICC ORDER interprets and clarifies a series of the rules incorporated in Ex Parte 174, Rules and Instruction for the Inspection of Locomotives Other-Than-Steam, issued last year.

—**Railway Locomotives & Cars**

Brake-X Test Shows Good Performance

Little wheel-tread and brake-disc wear is revealed by recent inspections of cars in different services.

Two cars equipped with Brake-X, the single-plate disc freight car brake first introduced by Buffalo Brake Beam Company in 1956, have each accumulated well over 100,000 miles of service.

Recent inspections show that their performances in two different services were nearly identical. This conclusion was reached after Baltimore & Ohio box car 469054 and Canadian National flat car 681009 were closely checked recently. The B&O box car had operated 127,424 miles prior to its inspection late last October. The CNR piggy-back flat had run 112,066 miles.

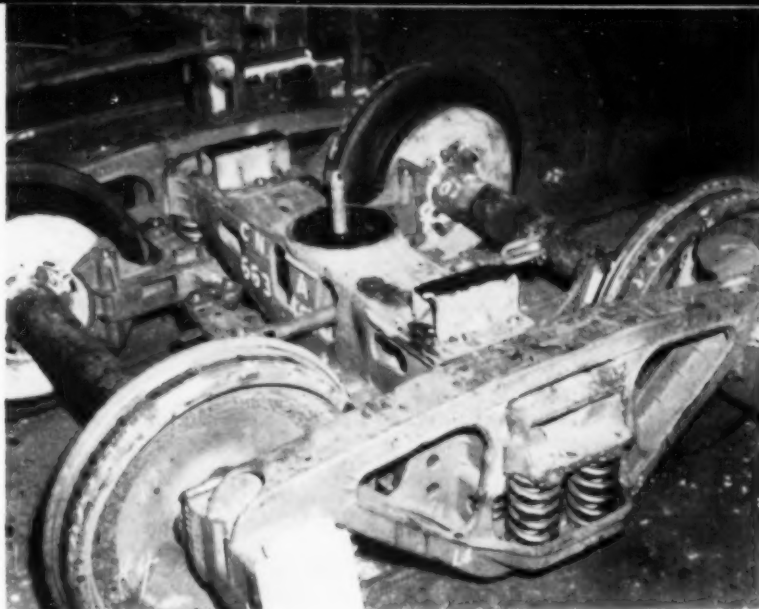
The B&O car has been operating in an assigned service. The CNR car has been making nightly runs between Toronto and Montreal, handling trailers. Both operations are high speed runs without excessive braking and with relatively light loads.

At the recent inspections, it was found that there was little wheel-tread and brake-disc wear. When the trucks were disassembled for inspection, the original brake shoe blocks were replaced, although they still had considerable serviceable material.

On the higher-mileage B&O car, remaining composition brake block material was about 40% of the original thickness. On the CNR car, about 55% of the original brake block thickness remained. These brake shoes had operated for 24 and 26 months respectively without attention. Replacement during these inspections assures comparable service periods without necessity for checking the brake shoes.

Since the original installation was made on B&O 469054, that railroad has equipped 50 other box cars with Brake-X.

Altogether, 85 carsets of Brake-X are in service on 16 US and Canadian railroads.



TRUCKS WITH BRAKE-X went under CNR car 26 months ago; now have operated 112,066 miles.



FORMAL INSPECTIONS involved complete disassembly of the Brake-X components and all other truck parts.



TREAD WEAR was low after the B&O box car ran 127,424 miles.



BRAKE DISCS on CNR flat car showed only 0.24-in. wear when inspected.



John L. Toole
CNR



W. H. Collins
CNR



Robert D. Timpany
NYC



Frank K. Mitchell, Jr.
NYC



Robert G. Flannery
NYC



Leland C. Lytle
NYC

People in the News

CANADIAN NATIONAL—John L. Toole, comptroller, appointed vice president—accounting and finance, Montreal, effective March 1, succeeding Robert D. Armstrong, who has accepted a senior position in another Canadian company.

W. H. Collins, division freight agent, St. John, N.B., appointed freight traffic manager, Atlantic region, Moncton, N.B., succeeding the late Edward C. Champ. Everett O. Steeves, division freight agent, Newfoundland district, St. John's, Nfld., succeeds Mr. Collins.

N. Scott Devenny, superintendent, Hudson Bay division at The Pas, Man., retired.

J. G. Pitts, assistant transportation engineer, Western region, Winnipeg, Man., appointed transportation engineer there, succeeding T. F. Holmes, transferred to Montreal.

Robert A. Bandoen and W. Herbert Bailey appointed staff officers of a new planning unit established in the economics branch, department of research and development, to assist in long-range planning activities for the railway. Thomas J. Openshaw appointed staff assistant to Dr. O. M. Solandt, vice president, research and development, succeeding Mr. Bailey.

J. W. Demcoe, general superintendent, Southern Ontario district, Toronto, Ont., appointed acting general manager, Central region, Toronto, succeeding W. C. Bowra, assigned to special duties. J. D. Hayes, senior superintendent, Toronto Terminals division, replaces Mr. Demcoe.

Bryce F. Keays, division engineer, Moncton division, appointed regional budget officer, Atlantic region.

CHESAPEAKE & OHIO—William P. Thurston, J. Speed Gray and George A. Sandmann, special assistants—coal traffic and development, Cleveland, appointed assistants to vice president—coal traffic and development. E. W. Haessler appointed coal traffic manager—staff, Cleveland.

Robert B. Seeley and Richard A. Miller, attorneys, appointed assistant general attorneys at Detroit and Cleveland, respectively.

J. A. Collins appointed general car foreman, Stevens, Ky., succeeding H. E. Blank, retired. J. H. Stroud succeeds Mr. Collins as general car inspector, Richmond and Clifton Forge divisions, Richmond.

W. A. Griffith, general agent, passenger department, Columbus, Ohio, transferred to Lexington, Ky., succeeding Ray S. Stewart, who will retire May 1. R. P. VanVoorst appointed division passenger agent, Columbus.

Doyle S. Morris, general attorney, appointed assistant general counsel, Cleveland. Robert S. Garnett, general attorney, Cleveland, named chief tax counsel there.

A. W. Duke, superintendent of car records;

B. E. Mavey, assistant superintendent of car records, and S. L. Morton, car accountant, Richmond, Va., have been transferred to Huntington, W. Va.

Harold W. Brewer, assistant general purchasing agent, promoted to general purchasing agent, Cleveland, succeeding S. R. Secor, now chief purchasing and stores officer (RA, Jan. 5, p. 31). William J. Eck, purchasing agent, succeeds Mr. Brewer. Rex J. Burns, assistant purchasing agent, promoted to purchasing agent. Thomas R. Grady, equipment assistant, named assistant purchasing agent. Joseph L. Tiggy, assistant to purchasing agent, promoted to assistant purchasing agent.

W. K. Weaver, Jr., assistant to vice president, Cleveland, appointed administrative assistant to vice president there.

E. D. Spiggle, general communications inspector, Richmond, named general supervisor communications there. I. W. Kuper succeeds Mr. Spiggle.

CHICAGO & ILLINOIS MIDLAND—C. D. Forth, general counsel, Springfield, Ill., elected vice president and general counsel. Position of vice president and general manager, formerly held by the late M. E. Gustavson (RA, Feb. 2, p. 34), abolished.

COTTON BELT—Albert J. Maloney, general freight agent, St. Louis, retired Feb. 1.

JERSEY CENTRAL Gerald E. Getz, assistant trainmaster, Allentown, Pa., appointed trainmaster there, succeeding Henry G. Smith, now general yardmaster at Jersey City, N.J. Rudolph Metrovich, assistant trainmaster, appointed trainmaster, Jersey City, with jurisdiction over freight operations in the terminal area.

Joseph P. Leahy, assistant engineer, Jersey City, and Thomas J. Reagan, supervisor work equipment, Elizabethport, named assistant engineers, maintenance of way. Alfred Wisman, supervisor welding, Jersey City, appointed supervisor of work equipment and welding.

NEW HAVEN George J. Crosby, cost accountant, promoted to auditor of disbursements, New Haven.

F. B. Uhrbrock appointed trainmaster, New Haven, Mr. Uhrbrock was formerly assistant trainmaster, Chicago & North Western.

Alfred B. Auerhaan, former safety engineer for Todd Shipyards, Eastern division, appointed director of safety for the New Haven. Sindo E. Cavalieri, safety agent, promoted to assistant director of safety.

James D. O'Neill, counsel, New York, appointed finance counsel, at New Haven.

NEW YORK CENTRAL—Robert D. Timpany, assistant general manager, Eastern district, Syracuse, N. Y., promoted to general manager of that district, succeeding Gregory W. Maxwell, elected president of the Terminal Railroad Association of St. Louis. Frank K. Mitchell, Jr., superintendent, Buffalo division, succeeds Mr. Timpany as assistant general manager. Robert G. Flannery, transportation superintendent, Buffalo division, succeeds Mr. Mitchell. Leland C. Lytle, assistant mechanical superintendent, Western district, Cleveland, succeeds Mr. Flannery.

William Cunitz, administrative assistant to director of public relations, appointed district public relations director, New York district.

SOUTHERN PACIFIC—The Research and Mechanical Standards Department reorganized as the Research and Development Department. P. V. Garin, engineer of research and mechanical standards, continues to head the department as manager of research and development. A. S. Pedrick and F. Kurz, assistant engineers of research and mechanical standards, named assistant managers of the new department.

William R. O'Neill, office manager of the Mechanical Department, named special representative of the general superintendent of the Mechanical Department.

Waldron A. Gregory, assistant general attorney, appointed general attorney, San Francisco, to succeed Burton Mason, who retired Feb. 1. H. A. Waterman named to replace Mr. Gregory.

Rode C. Olson, chief of division bureau, promoted to assistant general freight agent, San Francisco.

TOLEDO, PEORIA & WESTERN—Jerry Murray, sales manager, Kansas City, Mo., retired Jan. 16.

Patrick J. Rice, manager-rates, appointed general manager of the Rates and Divisions Department. E. F. Alberts, manager-divisions, named manager-rates and divisions.

UNION PACIFIC—William S. Rush appointed general agent, passenger department, Portland, Ore., succeeding Norton Burl Fallas, retired.

Maurice D. Baer appointed district traffic agent, Salt Lake City, Utah. Mr. Baer served the Bamberger prior to its dissolution.

Robert D. Toomey, general traffic agent, Medford, Ore., appointed assistant to traffic manager, Portland, to succeed Richard Ward, who retired Jan. 31. Leland J. Ziesmer succeeds Mr. Toomey.

VIRGINIAN—W. D. Taylor appointed assistant to chief engineer, Norfolk, Va., succeeding J. D. Hudson, retired.

WABASH—Howard A. Izard, tax auditor, retired Jan. 1.

Gilbert E. Paul, district passenger agent, appointed manager, parlor cars, and Joseph

W. New, assistant superintendent of dining and parlor cars, named manager, dining cars, both at St. Louis.

Thomas B. O'Connor, assistant general passenger agent, Detroit, appointed general passenger agent, Chicago, succeeding George G. Kottenstette, retired (RA, Jan. 19, p. 145).

John P. Turner, division passenger agent, Detroit, succeeds Mr. O'Connor. Robert J. Cripe, superintendent, Chicago Terminal division, named superintendent of transportation, St. Louis, to replace Lester A. High, retired. William G. Blades, assistant superintendent of transportation, replaces Mr. Cripe.

Rex K. Holmes, traveling passenger agent, Kansas City, Mo., appointed district passenger agent, Cincinnati, to succeed Thomas C. Hayden, retired.

WESTERN MARYLAND.—Edward P. Wiseman, director of valuation, Baltimore, retired Dec. 31, 1958. Nelson Hammond appointed valuation engineer, Baltimore. W. C. Ingham promoted from assistant engineer to senior assistant engineer; J. A. Awalt from chief clerk to valuation assistant and L. C. Byers, from Junior engineer to assistant engineer.

Carl N. Collins appointed assistant general freight agent and Kenneth E. Diehl named assistant to general freight agent, Baltimore.

Supply Trade

R. E. Russell has resigned as eastern region sales representative for Brandon Equipment Company. Mr. Russell, the developer of the Russell Sliding Bridge, will continue with his own company to serve the transportation industry with special equipment.

Raymond L. Morrison, Sr., president of the Morrison Railway Supply Corporation and the International Railway Car Leasing Company, has announced a major reorganization of these companies. The new structure is composed of one company and three affiliates. Morrison Railway Supply Corporation, to which Marcy L. Morrison has been elected executive vice president, will continue to handle the "Metalweld Process," reconditioning of rails, purchase and sale of railway rolling stock and track material, with general offices at Buffalo. The three affiliates are: Morrison Industries, Inc., with George Kass, as president, has taken over manufacturing operations, at Buffalo. It will operate the International Equipment Division, under Vice President S. J. Rosen, at the Buffalo plant, turning out a line of tire merchandising equipment. It also has taken over the International Railway Car plant at Kenton, Ohio, and will operate as the International Car Division of Morrison Industries under Vice President B. J. Yelin, producing railroad cabooses and "Campcars." The "Campcar" plant in Buffalo has been closed. Morrison Plan Inc., Buffalo, with Seymour Feldman as president and Theodore Jewett as vice president, will handle the leasing of new railroad maintenance equipment. International Railway Car Leasing Co., Buffalo, with R. L. Morrison, Jr., and Theodore Jewett as vice presidents, will handle the leasing of reconditioned revenue freight cars.

P. J. Kirst appointed western sales manager of the Rail Joint Company, Division of Poor & Company, at Chicago, succeeding R. W. J. Harris, who will retire Feb. 28. S. M. Harrison, vice president of Rail Joint Reforming Company, Birmingham, Ala., has been appointed also district sales manager for the Rail Joint Company in Birmingham.

Griffin Wheel Company has announced formation of the Griffin Pressure Pipe Division to produce and sell centrifugally cast pressure

pipe used for the transmission of water, gas and oil. It is anticipated production will begin early in 1960 at the company's Council Bluffs, Ia. plant. S. C. Prest, vice president and general manager, will head the new division.

The Elkon Company and its affiliate National Brake Company, Inc., 30 Church Street, New York, have announced the appointment of Ryan M. Caulfield as a member of their sales department. Mr. Caulfield was formerly associated with West Chemical Products Company, Inc.

Organizations

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—Interim business meeting will be held April 29-30 at the Congress Hotel, Chicago. Annual meeting will be held at the Shoreham Hotel, Washington, D.C., Oct. 5-7.

ATLANTIC STATES SHIPPERS ADVISORY BOARD.—Roger C. Avery, manager, Claim division, Traffic department, Neisner Brothers, Rochester, N.Y., elected president of this board, succeeding Robert A. Cooke, manager, Traffic department, Newspaper Publishers Association, New York. Darrel H. Smith, Jr., general traffic manager, International Salt Company, Scranton, Pa., succeeds Mr. Avery as 1st vice president. Other officers elected are: 2nd vice president, Howard D. Pollen, traffic manager, P. Ballantine & Sons, Newark, N.J.; general secretary, J. S. Wilson, general traffic manager, Sunshine Biscuits, Long Island City, N.Y.

CANADIAN INDUSTRIAL TRAFFIC LEAGUE.—New officers, elected at the CITL's annual meeting in Toronto, Feb. 17-18, are: President—H. J. Ringrose, general traffic manager, Hiram Walker & Sons, Ltd., Walkerville, Ont.; first vice president—Fred Ainsworth, traffic manager, Husky Oil & Refining, Ltd., Calgary, Alta.; second vice president—L. T. Smith, traffic manager, Kraft Foods, Ltd., Montreal; treasurer—A. A. Landry, traffic manager, General Mills, Inc., Toronto; and general secretary (elected)—R. Eric Gracey, Toronto. Mr. Ringrose succeeds A. F. Downey, also of Toronto, traffic and export manager of the Glidden Company, who has been president since 1957; while Mr. Landry succeeds F. M. Gore, traffic manager of the Seiberling Rubber Co. of Canada, at Toronto, who has served for many years as League treasurer.

PACIFIC COAST ADVISORY BOARD.—35th annual meeting will be held March 12-13 at the Hotel Sir Francis Drake, San Francisco. Speaker for the luncheon meeting March 13 will be John M. Peirce, general manager, San Francisco Bay Area Rapid Transit District.

PACIFIC NORTHWEST ADVISORY BOARD.—Annual and 103rd regular meeting to be held in the Multnomah Hotel, Portland, Ore., Mar. 12-13. Ben W. Heineman, chairman, Chicago & North Western, Chicago, will speak on "Some Basic Economics of Railroad and What They Mean To You," at the luncheon Mar. 13. R. E. Clark, chairman, Car Service Division, Association of American Railroads, Washington, D.C., will review the National Outlook as to Rail Transportation at the morning session Mar. 13. Capt. H. W. Leister, regional director, Western Traffic Region, Military Traffic Management Agency, Oakland, Cal., will talk on "Military Traffic Management" at the same session.

RAILROAD ASSOCIATION OF PHILADELPHIA.—Newly elected officers are: President, James Lawson, assistant general freight agent, Reading; vice president, Furman T. Fay, district sales manager, Canadian Pacific; secretary, W. P. Ringsdorf, assistant district traffic manager, Western Maryland; treasurer, James E. Groome, traffic representative, New Haven.



H. J. Ringrose



Fred Ainsworth

Invitations Out for Track and Structure Exhibit

The first allocation of space will be made on March 20 for the exhibit to be sponsored at the Coliseum, Chicago, September 14-17, 1959, by the Association of Track and Structure Suppliers. The exhibition will be held during the annual conventions of the Roadmasters' and Bridge & Building Associations.

Invitations to take part in the exhibit were mailed to interested supply firms on Jan. 5. Up to Feb. 17 requests had been received for 200 booths. A total of 276 booths is available. Firms interested in taking part in the exhibit should write Lewis Thomas, director of exhibits, Room 705, 59 E. Van Buren Street, Chicago 5.

ANNOUNCEMENT

In response to numerous inquiries regarding the Railway Cyclopedias published by Simmons-Boardman:

Car Builders' Cyclopedias—The 20th edition was published in 1957. It is anticipated that the 21st edition will be published in 1961.

Track & Structures Cyclopedias—The 8th edition was published in 1955. A subsequent edition will be published at such time as developments in this field warrant bringing the former edition up to date. Tentative date: 1962.

Locomotive Cyclopedias—The 14th edition was published in 1956. The publishing date of next edition to be determined.

Copies of the current editions are available at the following prices:

	Retail Price	Railroad Price
Car Builders' Cyclopedias	\$15	\$10
Track & Structures Cyclopedias	6	5
Locomotive Cyclopedias	6	5

SIMMONS-BOARDMAN
PUBLISHING CORPORATION
30 CHURCH STREET
NEW YORK 7, N. Y.

You Ought To Know...

Tax relief for railroads operating in Maine will be the target of a campaign this year by the Maine League of Railroad Men and Women. The league is urging that "the 8,000 railroad families in Maine combine their efforts to seek passage of a legislative act which would revise the state's excise tax rate for railroads."

Kerosene switch lamps are being replaced with battery-operated units on the Bessemer & Lake Erie. B&LE has already converted a small number of lamps, plans to convert an additional 100 this year. Cost of material and labor: about \$50 per lamp.

Rising Seaway costs are creating an uproar in Canada. Original estimate of Canada's share of the St. Lawrence Seaway tab was \$245,000,000. Now it's \$329,000,000. Conservative Minister of Transport George Hees says there was a "fantastic miscalculation" of Seaway costs by the former Liberal government.

ACL's freight terminal and yard switching facilities will be removed from downtown Tampa, Fla. The city will purchase 4.4 acres of the 17-acre tract for a modern auditorium and parking facilities. The remaining acreage is up for sale.

A turbo-prop cargo plane that can be operated for "as little as 3½ cents a ton-mile for freight" is being built by Canadair, Ltd., in Montreal, according to Earl D. Johnson, executive vice president of General Dynamics Corp. Such a plane, he told the Wings Club in New York, means that "now we are down there where we can compete with truck rates." Direct operating costs of conventional piston-engine aircraft are estimated at between 10 and 20 cents a ton-mile.

Delayed 23 minutes in New York's Grand Central Terminal, 1,000 commuters on a New Haven train got this explanation from the railroad: Engineer James Mowatt had been waiting for a workman of the proper classification to clean his window. The road said the engineer was within his rights, but showed "lack of spirit."

"The biggest hotel in the British Empire"—the Canadian Pacific's Royal York, at Toronto—is bigger than ever. With the opening, on Feb. 21, of a new addition, it boasts 1,600 guest rooms; can serve meals to 10,000 people at a time.

Earnings topping both 1958 and 1957 are anticipated this year by the Louisville & Nashville. L&N earned \$5.44 a share in 1958, \$7.63 a share in 1957. L&N President John E. Tilford told the New York Society of Security Analysts that earnings are expected to increase relatively more than revenues in 1959 due to permanent economies made since 1957. He also said L&N isn't a candidate for merger with anybody—but, he said, the road expects benefits from some coordination of facilities with Atlantic Coast Line.

Frisco has moved its Tulsa, Okla., dispatchers, CTC machine, relay telegraph office and PBX to a new building at Cherokee yard, West Tulsa. The move was accomplished in a few hours without any delays to trains.

The new \$7,000,000 coal loading facility at Toledo, Ohio, won the C&O the annual award of the American Material Handling Society's Toledo chapter for "the most outstanding material handling accomplishment in the Toledo vicinity in 1958."

Payment of 13.54% on Chicago & North Western's Second Mortgage 4½% convertible income bonds will be made April 1 to bondholders of record March 11. The payment, totaling \$9,142,922, represents interest accumulations for 1954, 1956 and 1957, in addition to 4½% due April 1 for 1958. Only remaining accrued interest will be 2.33% for 1957.

Delay in completing Chicago's passenger terminal consolidation study has apparently eliminated railroad property from consideration as a site for the University of Illinois' Chicago branch campus. The university wants to open its doors in 1963—best estimates now don't see final terminal consolidation before 1965 or '66. The consolidation study, now in its final stages, may be ready Apr. 1.

"The sick railroad industry," AWR President Clair M. Roddewig contends, "is in no condition to be singled out again to be the guinea pig for vast expansions of social benefits." His comment came as supporting evidence for the railroad proposal to liberalize railroad retirement benefits by 5 per cent—if the move is accompanied by a tightening up of standards for payment of unemployment benefits.

Discontinuance of passenger service to Albany, N. Y., is contemplated by the New York Central. The road plans to build a new station at Rensselaer, across the Hudson River from the New York state capital. Reasons for the move: declining passenger revenue, high city taxes and operating costs for Albany's Union Station.

Railway Progress Institute will unveil findings from its extensive passenger-service study in a series of regional meetings. Railroad chief executives and passenger officers will be invited to the meetings which are expected to begin late in March. Tentative sites for presentations include Chicago, St. Louis, Minneapolis-St. Paul, Washington, D.C., Cleveland, Boston, New York and a city in the far West, as yet undetermined.

Ninety-three per cent of all college-educated Class I railroad presidents started out as engineers or lawyers, Lackawanna Vice President—Operations W. G. White told a George Washington University audience in Washington, D.C., last week. He said that out of 44 Class I presidents with college degrees, 66 per cent hold engineering degrees, and 27 per cent law degrees.

LOCOMOTIVES

LOCOMOTIVE CRANES

- 1-25 Ton Diesel Electric Locomotive
- 1-45 Ton G.E. Diesel Electric Locomotive
- 1-25 Ton Ohio Diesel Locomotive Crane
- 1-30 Ton Browning Diesel Locomotive Crane
- 1-25 Ton Bay City 19061 Truck Crane

B. M. WEISS COMPANY

Girard Trust Bldg.
Philadelphia 2, Pa.

FOR SALE

New Tubular All-Steel Track Gauges \$5.50 (FOB-NY). Sturdy, insulated. Wearing parts recessed to gauge over burred rails. Built to AREA SPECIFICATIONS 20-50. Order Today! Integrity Tool and Equipment Co. 225 West 34th Street, New York 1, N. Y. Longacre 4-4091

FOR SALE

Baldwin Diesel Electric 120 Ton, 1000 H.P. Switcher. Rebuilt 1955, less than 2000 hrs since rebuilt. Bargain Price. STRIEGEL SUPPLY & EQUIPMENT CORP., 307 Jack Street, Baltimore 25, Maryland. Phone ELGIN 5-7922.

CLASSIFIED ADVERTISEMENTS

FOR SALE

REBUILT

RAILROAD CARS FOR INTERPLANT USE

GONDOLAS • BOX • FLAT

ERMAN-HOWELL DIVISION

LURIA STEEL & TRADING CORP.

332 South Michigan Avenue

Chicago 4, Illinois

WEbster 9-0500

Advertisers' Index

American Brake Shoe	3
Association of American Railroads	Inside Front Cover
Buckeye Steel Castings Co.	19
Classified Ads	37
Colorado Fuel & Iron Corp.	14, 15
Curtiss-Wright Corp., Princeton Div.	8
Erman-Howell Div. of Luria Steel & Trading Corp.	37
Integrity Tool & Equipment Co.	37
General American Transportation	6
General Railway Signal Co.	Back Cover
Kerite Co., The	Inside Back Cover
Portland Cement Association	11
Rail & Industrial Co., Inc.	37
Railway Educational Bureau	37
St. Louis Car Co.	30
Striegel Supply & Equipment Corp.	37
Timken Roller Bearing Co.	24, 25
Union Switch & Signal Div. of Westinghouse Air Brake Co.	4
Weiss Co., B. M.	37
Wine Railway Appliance Co., The	20, 21

3000 APPRENTICES

IN TRAINING

They are employed by the railroads which use our texts and grading service to train all their apprentices. Staffed by railroad men since 1909. The Railway Educational Bureau offers a complete 3- or 4-year program of technical lessons—from blueprint reading through Diesel Maintenance. All texts written with simplicity plus technical accuracy for on-the-job learning. Description of plan followed and fields covered sent without obligation. Special programs are available for individual employees preparing for advancement. The RAILWAY EDUCATIONAL BUREAU, 1809 Capitol Avenue, Omaha 2, Nebraska.

R. R. EQUIPMENT

HOPPER TANK CARBOOSES
FLATS GONDOLAS BOXES
AND SPECIAL DESIGNS

WE WILL REBUILD
TO YOUR SPECIFICATIONS
OR BUILD NEW
AS REQUIRED

RAIL & INDUSTRIAL
EQUIPMENT CO., Inc.
30 CHURCH STREET
NEW YORK 7, N. Y.
PLANT: LANDISVILLE, PA.

WORLD RAILWAYS

1956-57

A world-wide survey of railway operation and equipment covering 1,470 railways in 106 countries.

World Railways is to the railways what *Jane's Fighting Ships* and *All the World's*

Aircraft are to navies and to aviation. In its 500 pages of text and 897 illustrations is most of the information that railroaders, railway suppliers, and anyone interested in railroading throughout the world could possibly need.

CONTENTS: Locomotive and rolling stock builders and their latest products (88 pages). The world's railways (354 pages) divided into six geographic areas with index and tabular material under 32 headings. Major systems are exhaustively described and mapped and considerable information is included on recent activities and future plans. Diesel locomotives for rail transport (42 pages). Descriptions of diesel engines from 100 to 2,400 h.p. arranged by country. Descriptive articles of topical interest—radio, flexible rail fastenings, lightweight trains, maintenance-of-way machinery, etc.

price **\$20.00** postpaid

Add \$2.00 for foreign postage and remit in U.S. funds by draft or international money order.

RAILWAY AGE BOOKS

Dept. RA

30 Church St. New York 7, N.Y.

Enclosed is remittance for \$..... Send postpaid

..... copies of *World Railways*

Name

Address

City, zone, state

A Program Labor Should Support

With several union-management disputes under way or in the offing, how about looking at a couple of areas where interests of the parties are not at cross purposes? On some things, as the saying has it, you either hang together or hang separately.

With each other, railway managements have plenty of arguments—but they usually manage to make common cause where the welfare of the industry as a whole is involved.

Likewise with the unions—they differ sharply with each other, until some dispute with management comes along, which unites them. It's hard to see why the two sides don't more often practice the 'common cause' policy in dealing together with the 'outside.'

C&O Vice President John Kusik has suggested a fertile field where railway management and unions ought to be able to cooperate, to their great mutual profit. This is the area of *maximum utilization of plant*.

The country's railroad plant is now suffering acutely—as it almost always suffers chronically—from low utilization of its capacity to produce transportation service. If a freight car is moved with 10 tons in it, where it could easily hold 20 or 30 tons, there is a loss of one-half or two-

thirds in utilization. If 10 per cent or more of a railroad's freight cars are awaiting repairs (because there's no freight in sight for them), that's another waste in utilization.

Most railroad lines in this country could easily handle at least twice the number of trains that are now being run. The added cost would be far less than the added revenue.

How would it benefit railway labor if railroad capacity were being used more intensively? Primarily, of course, increased utilization of facilities would be directly paralleled by increased employment—more men to repair cars and locomotives, more men to man more trains. But the benefits to labor would not stop with direct employment of additional help.

Railroads would become a more prosperous industry—hence able to afford the improved wages the unions are always out after. As things are now, increased wages and pensions are too often taken out of the pockets of the poor fellows at the bottom of the seniority list. If unions were working with managements to make possible innovations to increase railroad traffic—then increased hourly labor costs could be absorbed without furloughing people.

The benefits of more intensive utilization of railroad facilities would be huge—to employees and employers alike. But nothing of value comes without a price.

Managements are usually willing to spend a dime to gain a dollar—but are the unions used to thinking this way? They would share the gains—are they willing also to share the pains (however slightly)? For example, would they consent to smaller crews and more daily mileage as a price for shorter and more frequent trains?

ALL WIN FROM INNOVATION: Mr. Kusik makes the point that all economic progress comes from innovation. You never get any better off by continually doing the same old thing in the same old way. Of course, innovation is never wholly painless, but if it's wise the gains far exceed the cost. If managements and unions would thoroughly explore the area of more intensive productivity of facilities—working out incidentally a formula for fairly sharing the low cost as well as the high profit—they would really have something.



resists water...like **KERITE** INSULATION

*It's the **KERITE** that makes the difference*



KERITE CABLE



30 Church Street, New York 7.

Branches in Ardmore, Pa., Boston, Cleveland, Chicago,
Houston, St. Louis, San Francisco, Glendale, Cal.



Why You Need an Automatic Yard...

Steady advances by GRS have now made it possible to classify freight cars automatically. GRS yard automation will help you cut expenses and improve your business.

Faster Classification. Cars are classified and on their way hours sooner, at less cost per car, and with fewer men. Your customers get better service. You improve your competitive position.

More Car Availability. Instead of cars clogging the main, or lingering in small,

outmoded yards waiting for classification—they keep moving in revenue-producing trains. You increase the use of your present cars, produce more income from your car fleet, without adding cars.

Investment Pays For Itself. A GRS automatic yard pays for itself in a few years through lower operating costs—then continues to produce the same benefits year after year. Financing is now available through The Transportation Act of 1958—the time to act is now!

GENERAL RAILWAY SIGNAL COMPANY

ROCHESTER 2, NEW YORK NEW YORK 17 CHICAGO 1 ST. LOUIS 1

